Soundtrack Pro 2
Getting Started

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Welcome to Soundtrack Pro

About Soundtrack Pro

Soundtrack Pro is a professional digital audio application designed for film and video post-production. As a Logic Studio owner, you will use Logic Pro to create, compose, and score your music, and Soundtrack Pro to edit and restore dialogue, create and edit sound effects and backgrounds, and mix a full soundtrack. The advanced integration of Soundtrack Pro and Final Cut Pro allows you to easily import and export audio projects, giving you the ability to collaborate with the world of Final Cut Studio editors.

Additionally, the advanced multichannel waveform editor in Soundtrack Pro can be used as a powerful external sample editor with Logic Pro.

About This Book

This book takes you on a guided tour of Soundtrack Pro. It begins by explaining how to set up a multitrack project and import audio files, then walks you through building a multitrack project, working with audio clips, and correcting common problems in audio clips. Then it explains how to mix and export your final mix, create a podcast, and send your mix back to Final Cut Pro.

After you're done reading this *Getting Started* book, you should have a basic understanding of what you can do with Soundtrack Pro. You can then continue to explore and learn by working with Soundtrack Pro and referring to the user manual.

What You'll Need

Simply reading this book will give you enough information to get you working confidently in Soundtrack Pro. However, having Soundtrack Pro open on your computer and using some audio files—either your own or the audio files provided with Soundtrack Pro—will make some of the tasks described in these pages easier to master.

If you want to be able to practice the steps as you read, you will need:

- Your computer, running Soundtrack Pro
- Audio files (if you don't have any, you can use the audio content that you installed with Soundtrack Pro)
- A video file (to play along with your project)

Now you can start exploring Soundtrack Pro.

Starting Your Project and Assembling Media

1

In Soundtrack Pro, you can create audio projects for a variety of uses: audio for video and film, submixes for DVD and other video needs, sound design, podcasts, and more. Before you can start editing your project, you need to set up your computer's audio system and assemble your media files.

In this chapter, you'll learn about:

- Opening Soundtrack Pro (p. 8)
- Setting Up Your Computer's Audio System (p. 9)
- Creating a New Multitrack Project (p. 10)
- Assembling Media in Soundtrack Pro (p. 12)

Opening Soundtrack Pro

The Soundtrack Pro interface is divided into several panes, each of which contains multiple tabs. These tabs contain all of the controls in Soundtrack Pro. As you're working, you can show and hide the left, right, and lower panes of the interface using the buttons in the top-right corner of the Soundtrack Pro Toolbar.

If you add a video file to the video track, it's displayed in the Video tab.
Each project has its own tab.
The Timeline is where you create a multitrack project with video and audio clips.
These buttons show and hide the left, right, and lower panes of the interface.
The Toolbar contains buttons for common commands.
These tabs show input and output levels and settings.
These tabs contain information about the clips, tracks, and other contents of a multitrack project.
These tabs help you locate media files. You can store frequently used files in the Favorites tab.
These tabs help you edit and mix your project.

You can learn more about the Soundtrack Pro interface in the Appendix , "An Introduction to the Soundtrack Pro Interface," on page 83.

To open Soundtrack Pro:

- Double-click the Soundtrack Pro icon located in your Applications folder.

When you open Soundtrack Pro, a new, untitled multitrack project is automatically created.

Setting Up Your Computer's Audio System

The sound from your audio files is output through the speaker or headphone jack that comes with your computer.

If you have external monitors, speakers, or other audio equipment, you'll want to connect them through the speaker jack so you can monitor your project's audio output. You can also connect other external audio equipment such as an audio interface or a mixer and use these audio tools to mix and listen to your project.

To view the audio input and output settings for your computer:

- Open the Audio Midi Setup utility (located in /Applications/Utilities/Audio Midi Setup).

To view the audio input and output settings for Soundtrack Pro:

- Select the Recording tab in the right pane of the Soundtrack Pro interface.

To learn more about working in the Recording tab, see the *Soundtrack Pro User Manual*.

Do You Need More Equipment?

By default, Soundtrack Pro uses the input and output devices that are defined in your computer's System Preferences.

For basic mixing, you can connect the built-in audio output on your computer to a pair of external speakers. This gives you two output channels for stereo playback.

For 5.1 surround mixing, you will need to connect an audio I/O device with six output channels to your computer to monitor the surround sound. The six output channels need to be connected to a discrete 5.1 surround speaker system for you to hear the surround sound.

To learn more about stereo and surround audio systems, control surfaces, and other audio equipment, see the *Soundtrack Pro User Manual*.

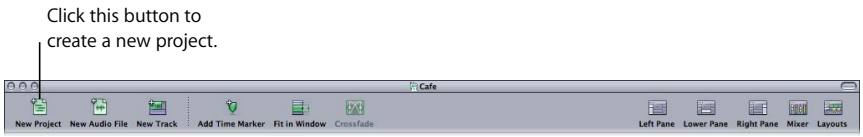
Creating a New Multitrack Project

A multitrack project contains multiple audio files and an optional video clip. Multitrack projects are used exclusively by Soundtrack Pro and are compatible with other Final Cut Studio applications.

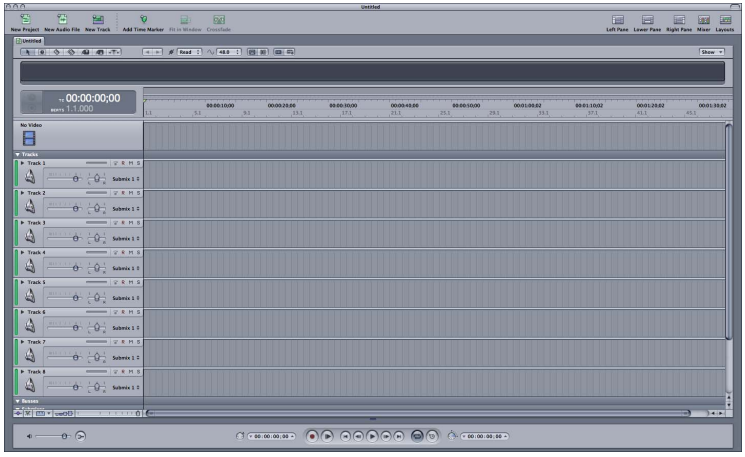
When you open Soundtrack Pro, a new multitrack project is automatically created. You can also create a new project at any time while working in Soundtrack Pro.

To create a new multitrack project:

- Click the New Project button in the Toolbar.



A new, empty multitrack project appears.

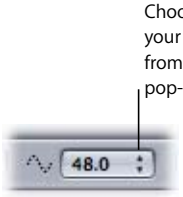


New Soundtrack Pro projects are, by default, set with a sample rate of 48 kilohertz (kHz).

Soundtrack Pro multitrack projects can have a sample rate of 32 to 192 kHz. Standard CD-quality audio uses 44.1 kHz; standard digital video–quality audio uses 48 kHz.

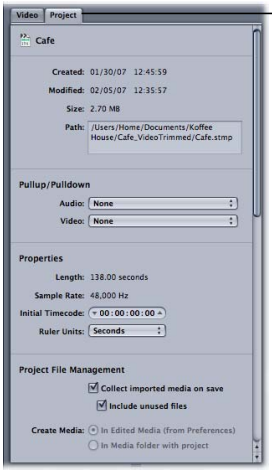
To set a project's sample rate:

- Choose a value from the Sample Rate pop-up menu.



To configure other project properties, including metadata and music settings:

- Click the Project tab and enter settings for your project.



Assembling Media in Soundtrack Pro

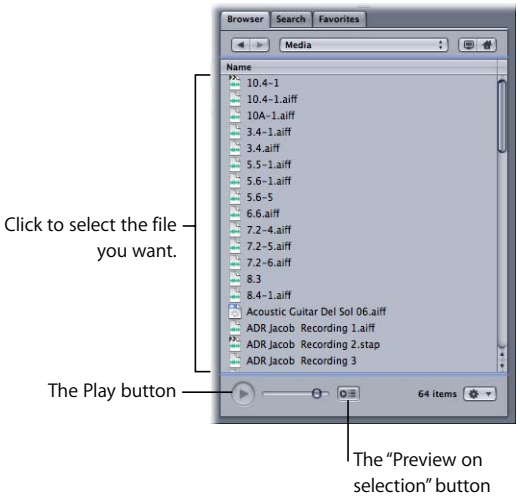
Now that you've created your project and configured its settings, it's time to assemble your media files. Soundtrack Pro has several tabs dedicated to locating your audio files and a method for indexing the folders of media stored on your hard drive or other volumes.

Browsing for Media

The Browser tab works like the Mac OS X Finder; in it, you can look through your computer's hard disk, external hard drive, or any other connected media device for files to use in Soundtrack Pro.

To locate files using the Browser:

- Select the Browser tab, then navigate through the file structure to find your file.



By default, any file you select will play automatically. To turn preview selection off, deselect the "Preview on selection" button. Then you can preview a selected file manually by clicking the Play button.

When you've located the media you'll use in your project, you can store it in the Favorites tab. The Favorites tab is a handy container in which you can put references to clips and files.

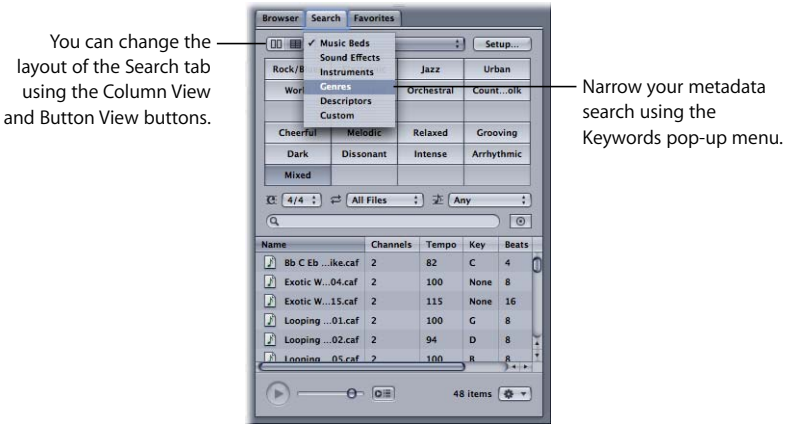
The Bin tab is also useful for locating audio files. By default, the Bin shows the media files associated with each open project.

Searching for Files

You can search for audio files using the metadata categories that are tracked by Soundtrack Pro.

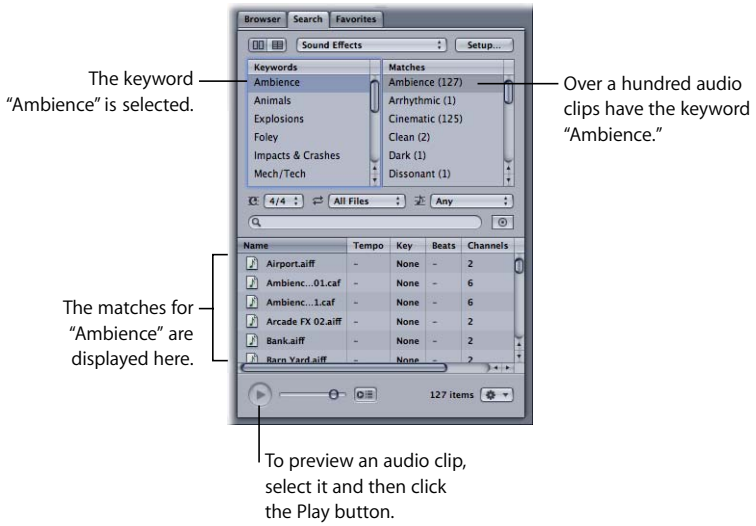
To search for files using the Search tab:

1 In the Search tab, choose the type of metadata to search for from the Keywords pop-up menu. (For example, you can choose All to see every keyword in your file's metadata, or you can search with categories like Instruments, Genres, and so on.)



You can change the layout of the Search tab using the Column View and Button View buttons at the left of the Keywords pop-up menu.

2 Select a keyword. The files that contain the keyword you selected appear in the list at the bottom of the Search tab.



If you want to listen to an audio file, select it and then click the Play button in the bottom-left corner of the Search tab.

Adding Files to the Favorites Tab

You can put references to frequently used files and folders in the Favorites tab. The Favorites tab is a good place to put references to files or folders you'll want to use in multiple projects.

To add a file to the Favorites tab:

- Control-click the file, then choose Add to Favorites from the shortcut menu.

Indexing Your Personal Media Files

The audio files that come with Soundtrack Pro are already indexed and ready to search. If you have a collection of audio files that are tagged with compatible metadata, including filename, genre, keyword, date, and so on, you can index them so you can search for them in the Soundtrack Pro Search tab.

For instructions on indexing your media files, see the *Soundtrack Pro User Manual*.

Where's Your Media?

Soundtrack Pro can process the following file types: AIFF, CAF, WAVE, Sound Designer II, NeXT sound files, and QuickTime movies. Soundtrack Pro can also decompress and process compressed file formats, including MP3 and AAC, and play QuickTime movies.

If a file you want to use is not in one of the supported file types, you can convert it. An easy way to convert a file is to open it in its original application and then export it as one of the Soundtrack Pro–compatible file types listed here.

Assembling Your Multitrack Project 2

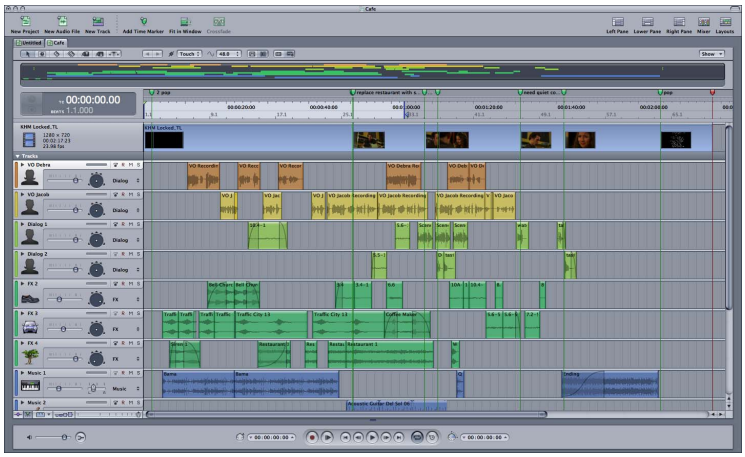
You start building a multitrack project by arranging the project's audio files on tracks in the Timeline. As you arrange the clips, you can cut, crossfade, and otherwise edit them in the Timeline.

In this chapter, you'll learn about:

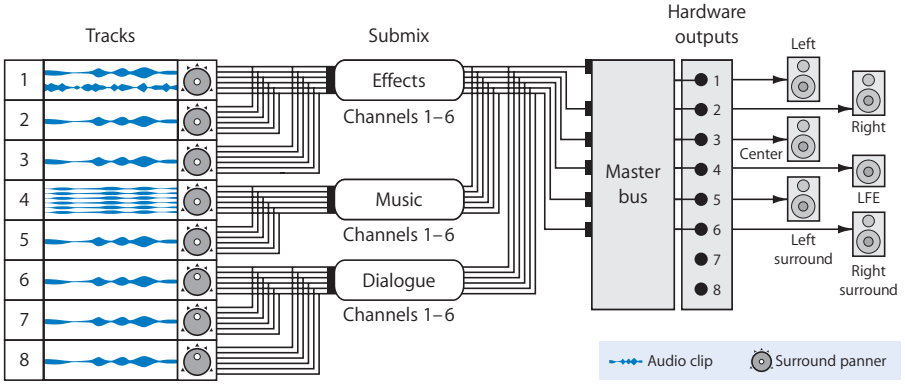
- Working with Multitrack Projects (p. 18)
- Playing and Saving a Multitrack Project (p. 19)
- Creating a Soundtrack Pro Multitrack Project from a Final Cut Pro Sequence (p. 22)
- Adding Clips to the Timeline (p. 23)
- Editing Clips in the Timeline (p. 24)
- Adding Markers to the Timeline (p. 26)
- Creating a Fade in an Audio Clip (p. 28)
- Adding a Crossfade Between Two Clips (p. 29)
- Adding Tracks, Busses, and Submixes to a Multitrack Project (p. 30)
- Working with Stereo and Surround Track Panners (p. 32)
- Routing Your Multitrack Project (p. 35)
- Adding Effects to Your Multitrack Project (p. 36)
- Automating Track, Bus, Submix, and Master Bus Parameters with Envelope Points (p. 39)

Working with Multitrack Projects

You build a multitrack project in the Soundtrack Pro Timeline. The Timeline contains tracks for arranging files; after the clip tracks, there are additional rows for busses (which are predominantly used to share effects to groups of tracks), submixes (which are used to create groups of like audio and to route these groups to physical outputs), and the Master bus (the final mix control).



Here is a typical organization for a film or video project that has submixes for effects, music, and dialogue. While this illustration doesn't mirror the Timeline's organization, it does show how to route signals from beginning to output using tracks, submixes, and the Master bus.



The Soundtrack Pro multitrack project shown above has eight tracks, which are routed to three surround submixes.

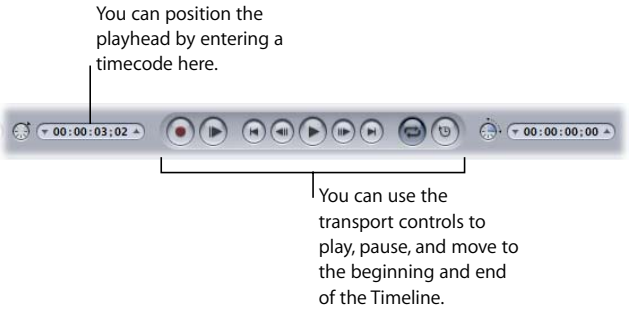
Each track in this multitrack project has a surround panner that feeds into one of the three surround submixes. These submixes are then routed to the Master bus, which feeds an 8-channel audio interface that connects to six surround sound speakers.

Don't let this illustration and explanation worry you—assembling a multitrack project is easy. You just drag audio clips from the Browser, Favorites, Search, or Bin tab directly into any track in the Timeline. You can also drag audio clips directly into the Soundtrack Pro Timeline from your hard disk or any external drives you have connected to your system. When you've assembled your audio clips, you can edit them and route them to the Master bus using some of the techniques explained in this chapter.

Playing and Saving a Multitrack Project

Before you learn about editing techniques, here are the basics of playing and saving multitrack projects.

You can play your project at any time while editing your multitrack project.


You can position the playhead by entering a timecode here.
00:00:03:02
00:00:00:00
You can use the transport controls to play, pause, and move to the beginning and end of the Timeline.

While you can use the transport controls to play your project, it's often easier to use keyboard shortcuts.

To play your project:

- Press the Space bar.

The project starts playing at the playhead's location.

To stop playback:

- Press the Space bar again.

Here are a few more keyboard shortcuts to use for playing a multitrack project.

To do this	Do this
To play your project at normal (1x) speed	Press L.
To pause playback	Press K.
To play your project in reverse at normal (1x) speed	Press J.
To double, triple, or quadruple the current playback speed	Press L or J two, three, or four times.
To move the playhead to the beginning of clip cycle regions	Press Return.
To move the playhead to the beginning of the Timeline and immediately start playing the project	Press Shift-Return.
To move the playhead to the previous edit	Press the Up Arrow key.
To move the playhead to the next edit	Press the Down Arrow key.
To solo a track	Click the Solo button on the appropriate track, then press the Space bar to play only the soloed track.
To mute a track	Click the Mute button on the appropriate track, then press the Space bar to play the project without the muted track.

As you know, you should save your project and save it often! A Soundtrack Pro multitrack project (.stmp) contains information about the clips it contains and how those clips are arranged and edited.

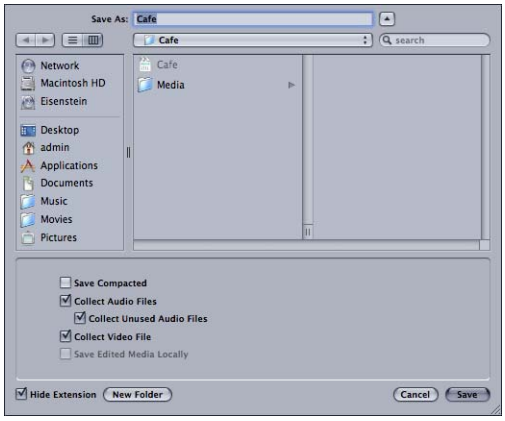
A multitrack project file does not include the audio files used in the project; instead, it refers to the files in their saved locations. This keeps the project file size relatively small.

Once you've specified a project's name and location, saving can be as easy as playing a project.

To save your project:

1 Choose File > Save (or press Command-S).

The Save dialog appears.



2 Enter a name for your file and a location to save it in, and configure any other Save options:

- *Save Compacted:* Saves the project without display data, which can save disk space but may cause the project to take longer to open.
- *Collect Audio Files:* Saves the project file, and a copy of every audio file the project uses, to the selected location.
  - *Collect Unused Audio Files:* Copies every audio file associated with the project (whether it is used in the project or not) to the selected location.
- *Collect Video File:* Copies the project's video file to the selected location.
- *Save Edited Media Locally:* Saves the project's edited audio files in the same folder as the project. If this checkbox is not selected, edited media will be saved to the Edited Media Location defined in Soundtrack Pro preferences.

3 Click Save.

After you initially save your project, choosing File > Save (or pressing Command-S) saves your project without opening the Save dialog.

Note: To change your Save preferences after setting them up, choose File > Save As.

Creating a Soundtrack Pro Multitrack Project from a Final Cut Pro Sequence

You can select one or more audio clips or entire sequences in Final Cut Pro and send them to Soundtrack Pro as a multitrack project.

To open a group of Final Cut Pro audio clips or a Final Cut Pro sequence in Soundtrack Pro:

1. Select multiple clips in the Final Cut Pro Timeline or a sequence in the Final Cut Pro Browser.
2. Control-click the selection, then choose Send To > Soundtrack Pro Multitrack Project from the shortcut menu.

   A dialog appears with several settings.
3. If you want to bring associated video into the multitrack project, select Include Background Video to include the sequence's background video with the project.
4. Verify that "Save project with latest clip metadata" is selected so that the metadata is included.
5. Enter a project name or use the default name, then click Save.

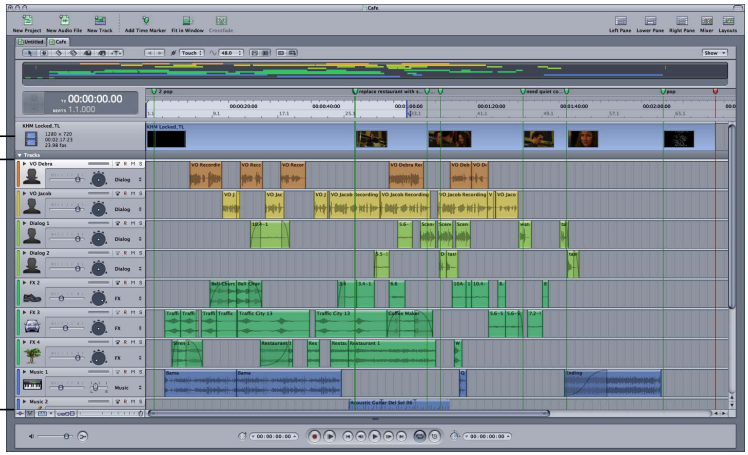
   This saves the content as a Soundtrack Pro multitrack project.

From here, you can modify the audio using Soundtrack Pro.

To learn how to export a Soundtrack Pro multitrack project to Final Cut Pro, see Chapter 6, "Exporting Your Multitrack Project," on page 73.

Adding Clips to the Timeline

A typical Soundtrack Pro multitrack project contains multiple audio clips on several audio tracks. It can also contain one video file on the video track.


The video track
The audio tracks shown are organized by function: orange and yellow for voiceover, lime for dialogue, green for effects, and blue for music.

After you add an audio clip to a multitrack project, you may want to modify it. When you cut or otherwise modify audio clips in the Timeline, the original media file is not affected; instead, the edits are saved as nondestructive Soundtrack Pro actions.

To add an audio clip to a track:

- Locate the file you want to use (the Browser or Search tab is a good place to start looking for files), then drag the file into an audio track in your project's Timeline.

Information about the clip is shown in the Details tab.
Drag the file from the Browser, Search, or Favorites tab into an audio track in the Timeline.

If you have a video file for your project, it's easy to add it to your project's video track. You can add one QuickTime movie (or a file in any other video format that QuickTime supports) to the video track. When you drag the video to the track, it automatically appears at the beginning of the Timeline. If the video has an audio track, that appears on the first audio track of the Timeline. Soundtrack Pro also automatically applies the movie's frame rate setting to the open audio project.

To add a video file to the video track in your project:

- Find the file you want to use, then drag it to the project's video track.

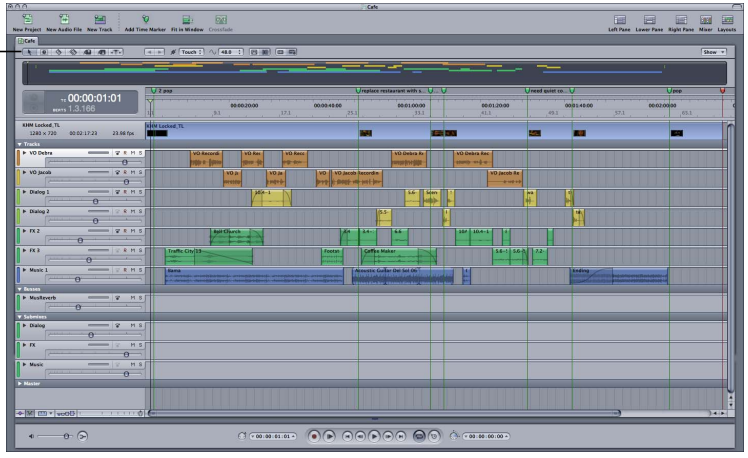
The video file appears in the Video tab and at the beginning of the video track of your project's Timeline.

Editing Clips in the Timeline

When you create a multitrack project, you should take a minute to consider how you will organize your clips on your project's tracks. For example, you may want to arrange clips on different tracks based on their content: dialogue, effects, and music is a common pattern for grouping clips on tracks.

While arranging your audio clips, you might have to resize, cut, paste, delete, or otherwise manipulate your clips. These basic edits are explained next.

Each of these tools can be used to edit audio files.



To move a clip on a track:

- Drag the clip left or right on the track, or up or down to another track.

To change the length of a clip:

- Place the pointer at the edge of the clip and then drag it left or right.

You know you can change the length of a clip when the resize pointer replaces the pointer.

To delete a clip:

- Select the clip, then press Delete.

  The clip disappears from the track.

To cut a clip into several segments:

1. Select the Blade tool in the Toolbar.

   The arrow pointer becomes a blade to indicate that you're cutting, not selecting, the clip.

2. Position the blade pointer over the clip you want to cut, then click.

   Each time you click, the clip is cut.

   When you're done cutting the clip, you can select the Selection tool to move, resize, or delete any leftover bits of the clip that you don't need.

   You can also cut all the clips in a project.

To cut all clips down the length of the Timeline:

1 Select the Blade All tool in the Toolbar.

The pointer becomes a double blade.

2 Position the double blade pointer at the location in the Timeline where you want to vertically cut, then click.

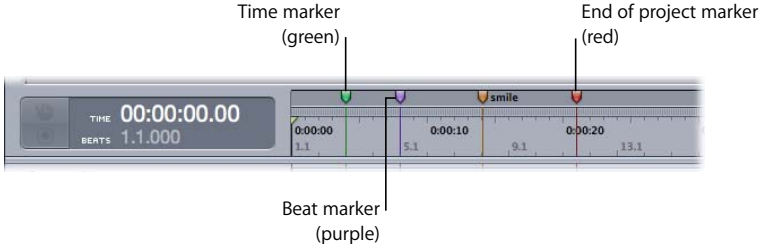
The clips are cut down the length of the Timeline.

When you're done cutting your clips, you can select the Selection tool to move, resize, or delete any leftover bits of the clips that you don't need.

Adding Markers to the Timeline

Soundtrack Pro markers are used to mark specific points in a multitrack project. They're often used to mark scoring and editing points in a project. Soundtrack Pro has four types of markers: beat, time, end of project, and podcast markers. This section describes the first three; to learn about podcast markers, see Chapter 6, "Exporting Your Multitrack Project" on page 73.

You can generally tell markers apart by their color: time markers are green, beat markers are purple, and end of project markers are red. If a project has many of the same type of markers, you can name individual markers with label tags. You can also attach comments to markers.



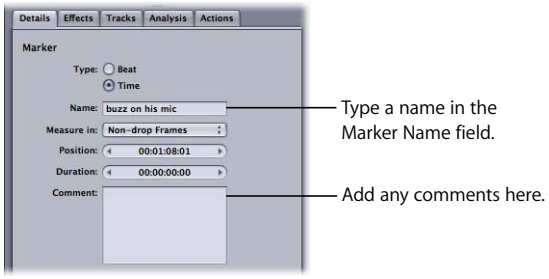
To add a marker to the Timeline:

1. Position the playhead where you want the marker.
2. Do one of the following:
   - Choose Mark > Set End of Project.
   - Click the Add Time Marker or Add Beat Marker button in the Toolbar.

The marker type you added appears in the Timeline.

To add name or comment text to a marker:

1. Select the marker to which you want to add text.
2. Display the Details tab by clicking it. Then type a name or comments for the marker you've selected in the appropriate fields and press Return.



The marker's name appears next to the marker in the Timeline. When you hold the pointer over the marker, the comment text appears onscreen.

You can easily navigate between markers in the Timeline.

To move the playhead between markers:

- Press Option-M to move to the next marker (to the right).
- Press Shift-M to move to the previous marker (to the left).

Creating a Fade in an Audio Clip

It's simple to add a fade to an audio clip. After the fade is placed, you can use the Fade Selector HUD to reshape it as appropriate.

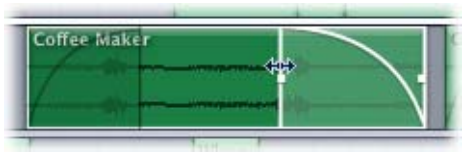
To create a fade in a clip in the Timeline:

1. Using the Selection tool, position the pointer over the top-left or top-right edge of the clip.

   The pointer becomes a fade pointer.

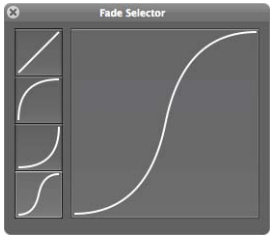
2. Drag from the corner toward the center of the clip.

   A fade is superimposed over the clip.



3. To lengthen or shorten the fade, drag the edge of the fade left or right.

   You can use the Fade Selector HUD to reshape your fade.



To reshape a fade's contour using the Fade Selector HUD:

1. Double-click the fade you want to adjust to display the Fade Selector HUD.
2. Select a fade shape to apply.

To learn more about the Fade Selector HUD, see the *Soundtrack Pro User Manual*.

Adding a Crossfade Between Two Clips

A crossfade creates a smooth, even transition between two overlapping audio clips by blending the crossfaded area together. Crossfades are often used to reduce the sudden changes in loudness that can result between clips.

After you apply a crossfade to two clips, you can adjust the crossfade's length, position, and curve.

To add a crossfade between two audio clips:

1 Verify that the Crossfade Mode button in the Timeline is selected.

2 Drag the first clip over the second clip. The more you overlap the clips, the longer the crossfade will be.

The crossfade appears on top of the clips.

Here are a few more ways to work with crossfades.

To do this	Do this
To adjust a crossfade's length	Hold the pointer over the crossfade's left or right edge until you see the crossfade pointer, then drag the crossfade's edge to a new location.
To adjust a crossfade's position	Hold the pointer over the top or bottom edge of the crossfade until the hand pointer appears, then drag the crossfade to a new location.
To adjust a crossfade's curve	Double-click the crossfade to display the Fade Selector HUD and then click to select a shape.

Adding Tracks, Busses, and Submixes to a Multitrack Project

Tracks, busses, and submixes are all organized in rows in the Timeline and they all function in a similar way. You can add multiple tracks, busses, and submixes to a project and change both their look and some of their functions.

Adding, Moving, and Removing Tracks, Busses, and Submixes

You add, move, and delete tracks, busses, and submixes using similar commands.

To add a track, bus, or submix to the Timeline:

- Choose Multitrack > Add Track, Add Bus, or Add Submix.

To move a track, bus, or submix to a different position in the Timeline:

- Drag the track, bus, or submix row to a new position within its category.

To remove a track, bus, or submix from the Timeline:

- Select the track, bus, or submix that you want to remove, then choose Multitrack > Remove Track, Remove Bus, or Remove Submix.

Customizing a Track, Bus, or Submix

You can give tracks, busses, and submixes custom names, icons, and colors to help you organize and sort them within the Timeline.

To change the name of a track, bus, or submix:

1. Select the name.

The name is highlighted, and a text field appears.

2. Enter a new name and then press Return.

The name of the track, bus, or submix changes.

To change the icon for a track, bus, or submix:

1 Double-click the icon.

The icon menu appears.

2 Select an icon to represent the track, bus, or submix.

The icon you selected replaces the previous icon.

You can also change the color of a track or bus.

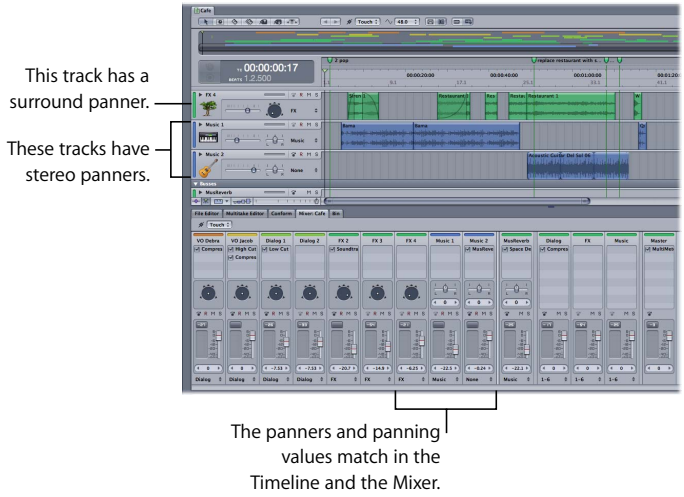
To change the color of a track or bus:

- Control-click the track or bus, then choose Track Color and the color you want from the shortcut menu.

The color bar and clips on the track or bus change to the color you indicated. Any clips that you add to the track or bus will also take on the new color.

Working with Stereo and Surround Track Panners

By default, tracks in Soundtrack Pro are set to stereo (two-channel) panning. You can switch from stereo to surround (5.1-channel) panning. If you need more control than the track's surround panner provides, you can pan a track using the Surround Panner HUD.


This track has a surround panner.
These tracks have stereo panners.
The panners and panning values match in the Timeline and the Mixer.

To adjust stereo panning on a track:

- Drag the panning slider left or right.

  As you drag, the pan value is shown above the slider.

A stereo panner appears, by default, in new tracks and busses in Soundtrack Pro. You can easily switch a track or bus panner from stereo to surround. You can also display a Surround Panner HUD if you want to make fine adjustments to the sound's location.

To switch a track or bus panner to surround:

- Control-click the track or bus, then choose Use Surround Panner from the shortcut menu.

The surround panner replaces the stereo panner.

Switching from a surround panner to a stereo panner uses the same process; instead of Use Surround, Use Stereo Panner appears in the shortcut menu.

Understanding Surround Sound

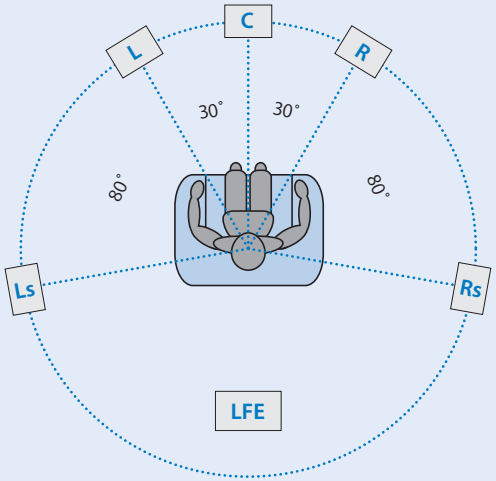
In Soundtrack Pro, the difference between mixing stereo and surround sound hinges on:

- The panner type you assign to the track
- The submix output you assign to the submix
- The audio hardware outputs you have connected to Soundtrack Pro

When mixing in stereo, you use two channels: L (left) and R (right). This is your typical configuration for car audio, headphones, and so on.

When mixing in 5.1 surround, you use six channels: L (left), R (right), C (center), Ls (left surround), Rs (right surround), and LFE (Low-Frequency Effects).

This is a typical 5.1 surround speaker configuration:



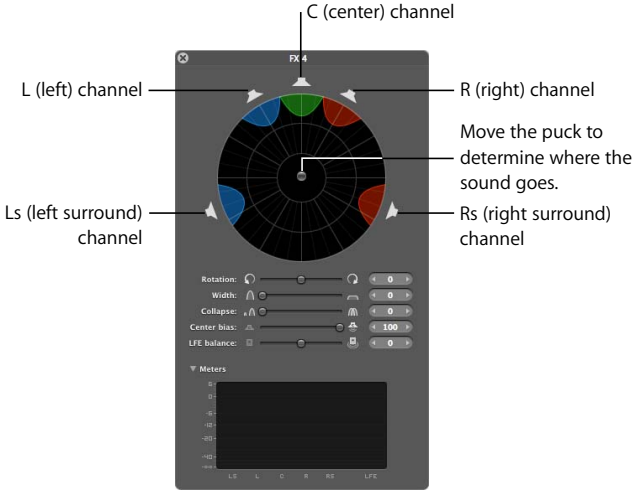
To adjust surround panning on a track:

- Move the puck to determine where the sound goes.

Surround sound creates a sense of perspective by placing sounds in circular space; therefore, adjusting panning changes where the sound goes. You can pan a track's sound through any of the 5.1 surround channels: L (left), R (right), C (center), Ls (left surround), Rs (right surround), and LFE (Low-Frequency Effects). The LFE channel is controlled with its value slider at the bottom of the Surround Panner HUD.

If you want to make fine surround adjustments, you can use the Surround Panner HUD.

The Surround Panner HUD includes controls both for balancing the channel to which the sound goes and for how the channels interact.



To display the Surround Panner HUD for fine panning adjustments:

- Double-click the surround panner.

The Surround Panner HUD appears.

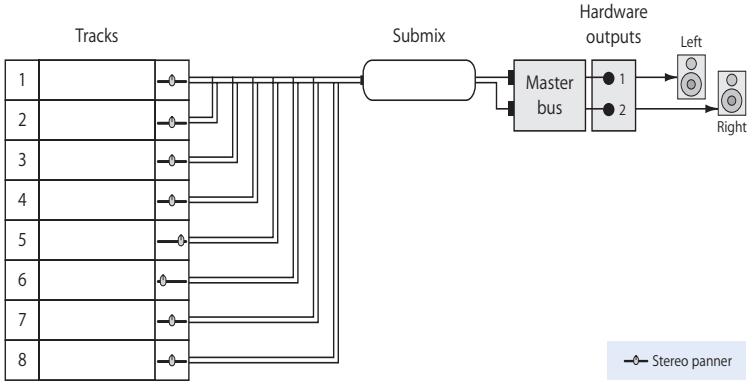
To do this	Do this
To move the puck	Click anywhere in the panner and drag the puck to the desired location.
To automatically move the puck to the center	Double-click anywhere in the panner. The puck automatically goes to the center of the panner.
To hold the speaker angle static while adjusting the puck's distance from the center	Hold down the Option key while dragging the puck.
To hold the distance from the center static while adjusting the speaker angle	Hold down the Command key while dragging the puck.

To learn more about the Surround Panner HUD, including how to use its advanced controls, see the *Soundtrack Pro User Manual*.

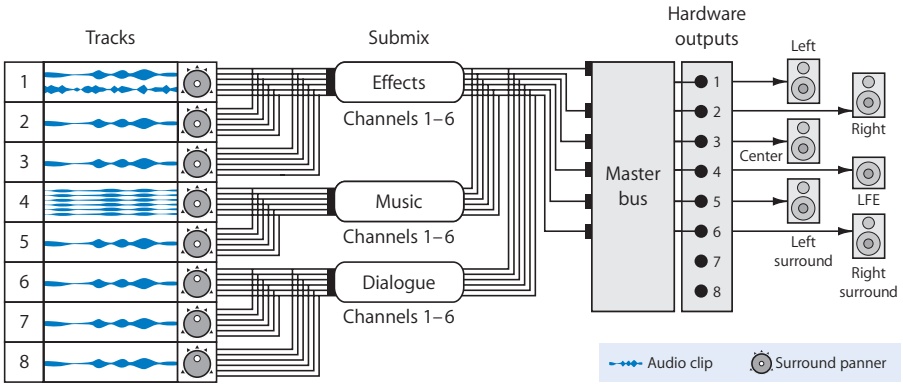
Important: Using a surround panner on a track is just one step in achieving a surround signal output. Assigning surround sound to a track requires the surround panners to be assigned to the track, the correct submix output to be assigned to the submix, and the surround audio hardware outputs to be connected to Soundtrack Pro. Without these three elements correctly assigned, your surround mix will not work correctly. For more information on configuring surround sound, see the *Soundtrack Pro User Manual*.

Routing Your Multitrack Project

A simple multitrack project contains several tracks and a submix; the signal is then routed through the Master bus and out the hardware outputs.



You can easily create multiple submixes of the same project by adding busses and submixes and then routing the appropriate tracks through them.



As shown in the illustration above, you can route tracks to various submixes; in the illustration, tracks 1–3 contain effects, 4–5 contain music, and 6–8 contain dialogue. Then you can adjust the volume or add effects to each of the three submixes. Finally, all three submixes are combined and output through the Master bus.

To learn about routing tracks, see the *Soundtrack Pro User Manual*.

Adding Effects to Your Multitrack Project

Soundtrack Pro comes with an impressive collection of effects, including the following:

- *Delay,* which can be used to add echoes and other recurring sounds
- *Distortion,* which change the tone of the audio signal to re-create the sound of overdriven tube amplifiers or digital distortion
- *Dynamics,* which let you shape the volume of your projects over time
- *EQ (equalization) and Filter,* which let you change the level of selected frequencies. EQ provides a powerful way of shaping the sound of your projects.
- *Imaging,* which let you make certain sounds or the overall mix seem wider and more spacious
- *Modulation,* which delay an audio signal and shift when the delayed signal plays back relative to the original signal
- *Pitch,* which transposes or creates unity, thickness, or harmony on audio tracks
- *Reverb,* which can be used to simulate the sound of acoustic spaces

- *Specialized,* a collection of effects which help you reduce noise or add high frequency components or bass signals
- *Utility,* a collection of effects which help you handle routine tasks

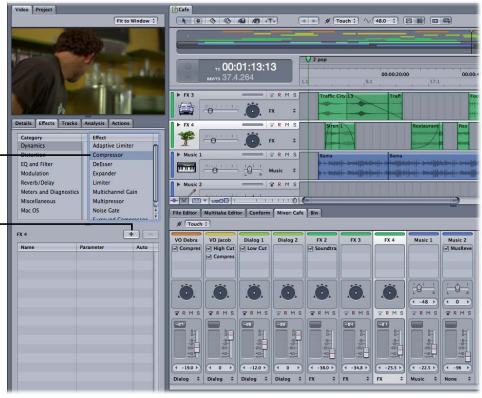
Note: The *Soundtrack Pro User Manual* and the *Soundtrack Pro Effects Reference* (available in the Help menu) provide in-depth information about the various effects available in Soundtrack Pro.

You can add an effect to any track, bus, or submix as a realtime effect. A realtime effect modifies the audio signal as it passes through the effect. Applying an effect as a realtime effect is useful because you can immediately identify the effect's influence on the project.

You can add realtime effects to a track, bus, or submix, or to a project's Master bus.

To add a realtime effect to a track, bus, or submix, or to the Master bus:

1. Select the track, bus, submix, or Master bus to which you want to apply the effects.
2. In the Effects tab of the Inspector, select the effect you want to apply from the Effects list. Then click the Add (+) button in the Effects tab to apply the effect.



3 The effect's Advanced Settings window appears. If necessary, adjust the effect, then click the Advanced Settings window's close button.

Make any required changes, then click the close button.

The Compressor Advanced Settings window

After you apply the effect, you can also adjust its parameters in the Timeline or Effects tab, and turn it on or off by selecting or deselecting its checkbox in the Effects tab.

Click the disclosure triangle next to the track name to view the effect. you added.

You can also click the effect's disclosure triangle in the Effects tab and adjust the effect parameters.

Automating Track, Bus, Submix, and Master Bus Parameters with Envelope Points

Each track, bus, and submix in your Timeline, as well as your project's Master bus, has a set of envelopes for volume, pan, and other parameters. Creating and adjusting envelope points is also often described as automating an envelope or using automation.

When you add an effect to a track, a bus, a submix, or the Master bus, it automatically gets envelopes for each parameter that can be automated and that is associated with the effect. To automate the envelope line, you can add points to the envelope line and move the points up and down to change the parameters of the track, bus, submix, or Master bus over time.

To automate a track's parameters:

1. Select the track that contains the effect parameters that you want to automate.
2. In the Effects tab, click the disclosure triangle next to the effect you want to automate and verify that the Auto checkbox for each parameter that you want to automate is selected.
3. In the Timeline, click the track's disclosure triangle to display the track's envelopes.

   The envelope parameters for the effects that are applied to the track appear as straight lines.
4. To add an envelope point anywhere on the line, double-click the envelope line.

   As you double-click the envelope, envelope points appear; a number, indicating the envelope point's level, also appears. You can drag the envelope points up and down to adjust their levels. You can also drag the envelope points left and right to adjust their positions.

5. To make finer adjustments to an envelope, zoom in to the track using the Zoom slider, then continue to add and move the envelope points.
6. When you're done automating the envelope, play the track to hear the effects of the automation you applied.

Here are more ways to work with envelopes and envelope points.

To do this	Do this
To select an envelope point	• Click it.
To select multiple envelope points	• Drag across multiple points.
To move one or more envelope points	• Drag the selected envelope point or points left or right to a new position or up or down to a new value.
To set the value of an envelope point numerically	• Control-click the envelope point, choose Set Value from the shortcut menu, then, in the dialog that appears, enter a new value.
To nudge an envelope point left or right	• Select an envelope point or points and then press Command–Left Arrow or Command–Right Arrow to move the envelope point or points to the next or previous gridline. • Select an envelope point or points and then press Command–Option–Left Arrow or Command–Option–Right Arrow to move the envelope point or points to the previous or next pixel.
To nudge an envelope's value up or down	• Select an envelope point or points, then press Command–Up Arrow or Command–Down Arrow to move the envelope point or points up or down by five pixels. • Select an envelope point or points, then press Command–Option–Up Arrow or Command–Option–Down Arrow to move the envelope point or points up or down by one pixel.
To copy and paste a sequence of envelope points	• Select the envelope points you want to copy and paste. Press Command-C to copy the envelope points, and then position the pointer where you want to paste the envelope points and press Command-V to paste.
To delete one or more envelope points	• Select the envelope points you want to delete, then press Delete.

Working with Individual Audio Files

3

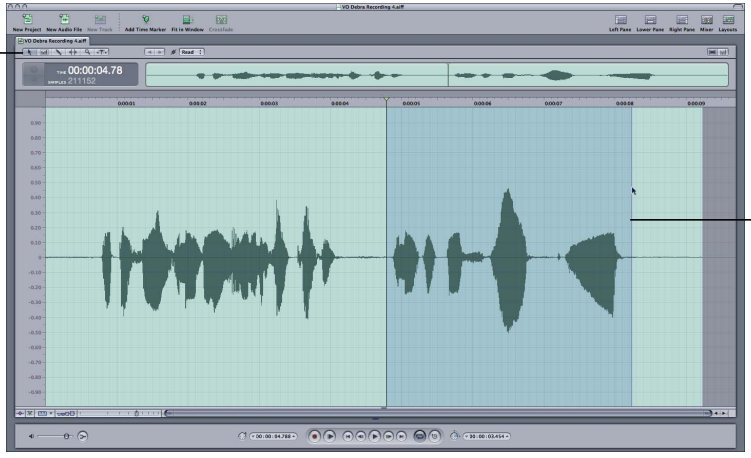
In Chapter 2, you learned how to assemble and arrange files in a multitrack project. This chapter explains how Soundtrack Pro processes different audio files and how to edit and apply effects to a single audio file.

In this chapter, you'll learn about:

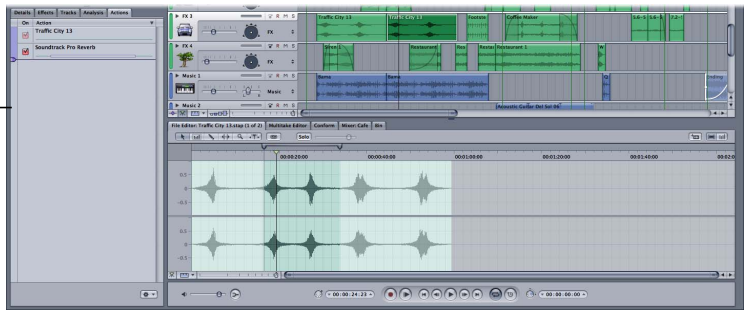
- Editing Audio Files (p. 41)
- How Soundtrack Pro Processes Audio Files (p. 42)
- Where to Edit Audio Files (p. 42)
- Opening a Logic Pro Audio File in Soundtrack Pro (p. 46)
- Adding Processes and Effects to a File with Actions (p. 47)
- Using the File Editor Tools (p. 50)

Editing Audio Files

The File Editor project view and the File Editor tab are good places to edit an audio file's waveform, correct common audio problems, and use nondestructive actions to apply processes like EQ and noise reduction to a file.


Use these tools to stretch, zoom, scrub, and otherwise edit the file you selected in the Timeline.
An audio file open in File Editor project view

When editing an individual audio file, some edits, including normalizing or amplifying levels, applying effects, and applying noise, pop, and click reduction, are applied as nondestructive actions. Actions can be reordered, turned on or off, and removed at any time using the Actions tab.



The Actions tab lists the actions applied to "Traffic City," the file that's open in the File Editor.

This chapter is divided into two sections. The first section explains the different ways that Soundtrack Pro processes audio files associated with multitrack projects and single audio files that are not associated with multitrack projects. The second section explains how to perform specific edits and apply effects to audio files in both the File Editor tab and in File Editor project view.

How Soundtrack Pro Processes Audio Files

Soundtrack Pro can process a variety of audio file types, including AIFF and WAV files. To allow you to nondestructively edit a file using Soundtrack Pro actions, Soundtrack Pro will often automatically save a copy of your file as an audio project (.stap) file. This lets you immediately start nondestructively editing your file.

Any changes you make to a file's frequency spectrum or waveform, any sample edits, audio stretching, or processing effects you add to a file are applied as actions. After adding actions to a file, you can change the order in which they are applied, turn them on or off, or remove them in the Actions tab.

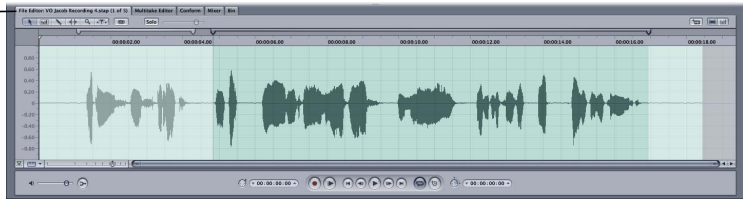
Actions are useful because they are nondestructive, and you can easily preview, reorder, and remove them in the Actions tab.

Where to Edit Audio Files

You can work with an individual audio file in two locations in Soundtrack Pro. You edit files that are part of a multitrack project in the File Editor tab. You edit files that are not connected to a multitrack project in the File Editor project view.

Editing Files That Are Associated with a Multitrack Project in the File Editor Tab

You can nondestructively edit and apply effects to audio files used in a multitrack project in the File Editor tab. It is easy to open a single file from the Timeline of a multitrack project—simply click that file in the Timeline, and it appears in the File Editor tab below the Timeline.



The File Editor tab, displaying a file selected in the Timeline (not shown)

When you work on individual files in the File Editor tab, you don't need to save or update individual audio files. Saving the multitrack project automatically saves all the individual audio files associated with the multitrack project.

Tracking File and Clip Relationships

One thing you do need to keep track of is the relationships between multiple clips that refer to the same audio file.

If you apply an effect to an .aiff file in a multitrack project, Soundtrack Pro creates an audio file project (.stap) from the original file to allow you to edit the file nondestructively, and the effect is applied as an action to the new .stap file.

The situation is complicated when multiple clips refer to the same audio file.

For example, if you drag three copies of a .wav file into the Timeline of a multitrack project, you create three new clips, each pointing to the original .wav file. When you select one of the new clips to begin editing it, a new audio file project is created from the .wav file that the clip refers to. Any edits you make are applied to the new audio file project, and then all three clips are updated to point to the new audio file project that was created.

The example above is useful when you want to do file cleanup operations such as noise reduction across multiple clips that share the same file. Applying an effect to any one of the clips will edit all the clips that point to that file. However, what if you want to edit the audio in a single clip?

To edit a single clip (and not the rest of the clips associated with the source file), you create an independent audio file project. This makes a new audio file for each selected clip. Creating an independent audio file also conveniently trims the file to match the original clip's length.

To open a file (or the file a clip refers to) in the File Editor tab, do one of the following:

- Click the file. When the file (or clip that refers to a file) is selected in the Timeline, it appears in the File Editor tab below the Timeline.
- Drag a file from the Browser tab, Search tab, Favorites tab, or Bin tab into the File Editor or Timeline. The file's waveform appears in the File Editor tab below the Timeline.

Important: Remember that when you work in the File Editor tab, you don't need to worry about saving audio files associated with a multitrack project because all the individual audio files in the multitrack project are automatically saved.

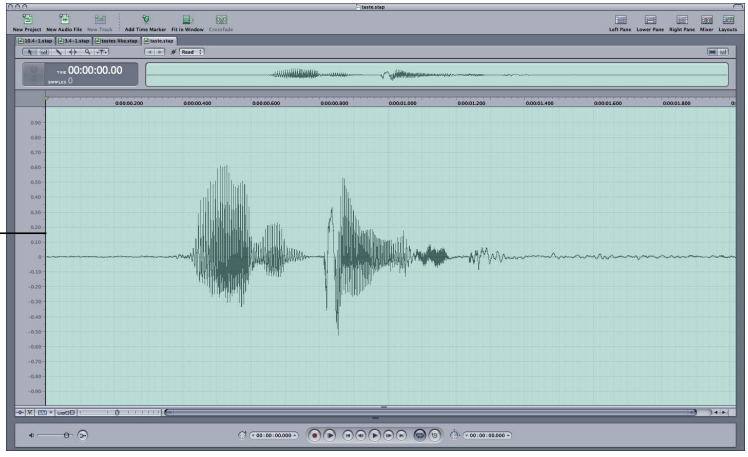
To open a file (or the file a clip refers to) as an independent audio file project:

- Select the clip, then choose Clip > Replace with Independent Audio File Project.

The selected clip is replaced with a new independent audio file project.

Editing Single Audio Files in File Editor Project View

If you are not working in a multitrack project and want to edit single audio files, you can edit in the File Editor project view. A single audio file, opened from the Browser, Search, or Favorites tab appears in the File Editor project view. You may have several audio files open simultaneously; when you do, each file has its own File Editor tab.



If you double-click a file, it appears in the full-screen File Editor.

When you edit or apply an edit or effect to a file, Soundtrack Pro automatically converts the file from its original file format to an audio file project. This conversion allows the edits to be applied to the file as nondestructive actions. By default, Soundtrack Pro chooses the audio file project format so that it can save your actions nondestructively.

Unlike when editing files associated with a multitrack project, you must save the edits you apply to an audio file project or other file type.

To open an audio file project or other single audio file in the File Editor project view, do one of the following:

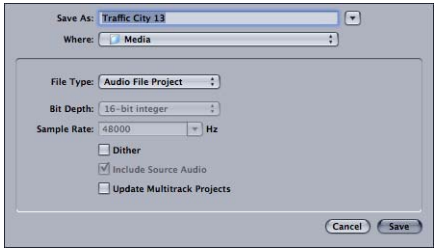
- Double-click a file in the Browser, Search, or Favorites tab.
- Open a file from Final Cut Pro or another audio application.

Note: A single file from a multitrack project also appears in the File Editor project view when you double-click that file in the Timeline.

To save an audio file project or other single audio file:

1. Choose File > Save.

   A Save dialog appears.



2. Enter a name for your file in the Save As field and define where to save it using the Where pop-up menu.
3. Choose a file type for saving your audio file project and select any other applicable options.
   - *Bit Depth:* Choose between 8-bit and 32-bit integer or floating point bit rate.
   - *Sample Rate:* Choose between 32,000 and 192,000 Hz.
   - *Dither:* Reduces quantization errors in low-level audio signals, such as the end of a fade-out or the last trailing moments of a reverb effect. Dithering is useful when saving a project at a lower bit depth or sample rate.
   - *Include Source Audio:* Includes a copy of the source audio files in the audio file project. Not selecting the checkbox includes a link to, instead of a copy of, the original source audio.

     Note: If you don't select the Include Source Audio checkbox, the original audio file is not saved as part of the project file and your project will not play unless the original file is available in its original location.

- *Update Multitrack Projects:* If you have used a file associated with the multitrack project you are saving in one or more multitrack projects, Soundtrack Pro can replace every instance of the old file with the file you are currently saving. To enable this switch, select the Update Multitrack Projects checkbox.

  Important: To write over the original file destructively, save the file using the original file type, not the new audio file project.

4 Click the Save button.

Your file is saved.

Opening a Logic Pro Audio File in Soundtrack Pro

The Open in External Editor feature allows you to edit or process mono, stereo, and multichannel files using the editing tools and features in Soundtrack Pro.

To open a Logic Pro audio file in Soundtrack Pro:

1 Select an audio region in the Logic Pro Arrange window.

2 Choose Option > Audio > Open in c.

Soundtrack Pro opens and displays the audio file associated with the selected audio region.

Note: Logic Pro allows you to select any external editing application you wish to use. Logic Pro ships with Soundtrack Pro as the default external editing application. If you previously selected a different application, that name will be seen in the Logic Pro Options menu. To learn how to change an external editor in Logic Pro, see the *Logic Pro User Manual*.

To send the edited audio back to Logic Pro:

1 After you've edited the audio in Soundtrack Pro, choose Process > Flatten All Actions to render your changes.

2 Save the file by choosing File > Save.

Note: Logic Pro cannot read Soundtrack Pro project files directly. Files must always be saved as flattened audio files.

3 Return to Logic Pro. The audio file that you edited in Soundtrack Pro automatically updates.

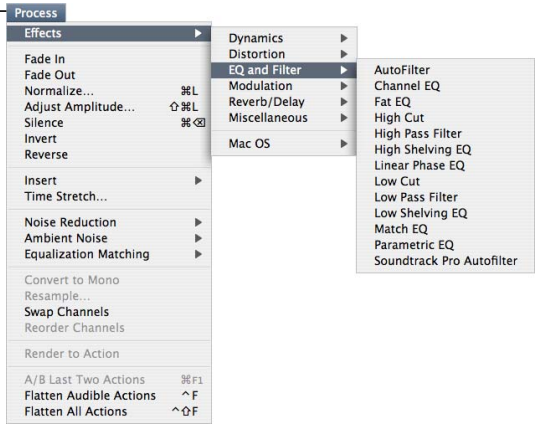
For more information, see the *Logic Pro User Manual* and the *Soundtrack Pro User Manual*.

Adding Processes and Effects to a File with Actions

When you add a process or effect, like EQ or reverb, to an audio file, it is applied as an action. Actions are useful because they are nondestructive and easy to work with; you can easily preview, reorder, and remove them in the Actions tab. When you're happy with the actions applied to a file, you can flatten the actions onto the audio file to which they are applied. This applies all of the actions in your list as a single action. While this makes the actions uneditable, it reduces the size of the audio file.

Any of the Soundtrack Pro processes or effects can be applied to an audio file as an action. Take a minute to check out the variety of processes and effects available in the Process menu.

When you add any process or effect from the Process menu, it is applied as an action.



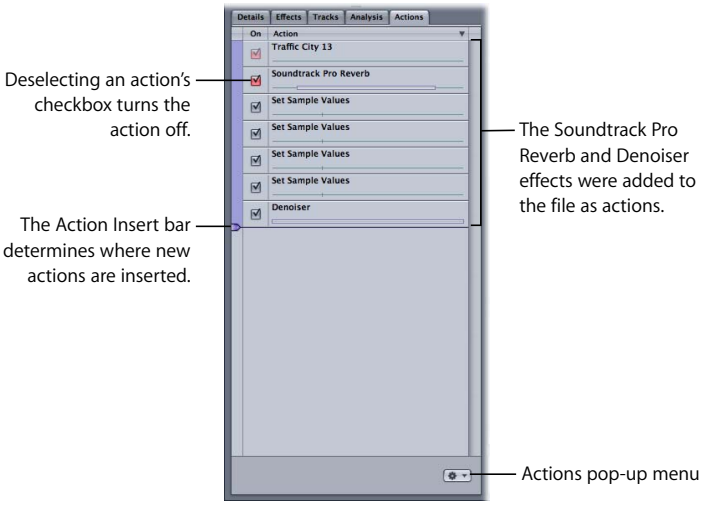
You can add processes and effects to a file in several ways. Here's an easy way to add a process or effect to a file.

To add a process or effect to a file (or a section of a file) as an action:

1. Select the file (or section of the file) you want to add the effect to in the File Editor.
2. Choose Process, then choose the process you want to apply as an action.
3. Some actions have a dialog that contains setting options. Choose the settings you want, then click Apply.

The action appears in the Actions list.

When you add an action, it automatically appears above the Action Insert bar.



Here are some easy ways to work with actions.

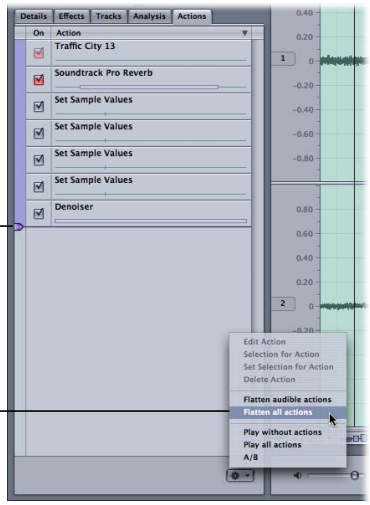
To do this	Do this
To edit an action's settings	Double-click the action in the Actions list. The settings appear.
To turn an action on or off	Select or deselect the action's checkbox.
To reorder a list of actions	Select an action, then drag it up or down to a new location in the Actions list.
To define where new actions are added to the Actions list	Drag the Action Insert bar up or down to a new location in the Actions list.
To delete an action from the Actions list	Select the action, then press Delete.

Flattening an Actions List

You can flatten all the actions in an Actions list into a single action. Flattening actions renders the actions into the file, reducing the file's complexity and size. Remember, however, that once you flatten an Actions list, you cannot reorder or edit the actions: after flattening, the actions you flattened become one action.

To flatten your Actions list:

1. Move the Action Insert bar directly below the last action you want to flatten.
2. Choose "Flatten audible actions" or "Flatten all actions" from the Actions pop-up menu.
   - *Flatten audible actions:* Flattens only the actions above the Action Insert bar.
   - *Flatten all actions:* Flattens all the actions in the Actions list, regardless of the location of the Action Insert bar.



Make sure the Action Insert bar is below the last action you want to flatten.

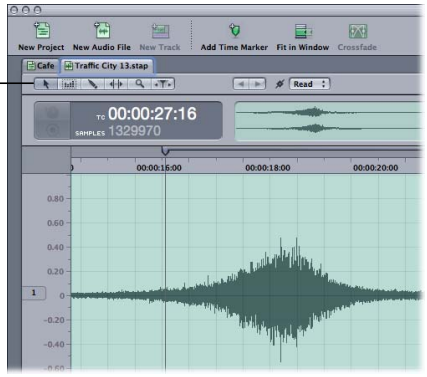
Then choose a flatten actions option from the Actions pop-up menu.

The actions are flattened.

Using the File Editor Tools

The File Editor tab and the File Editor project view have their own special toolsets for performing precise waveform edits.

The File Editor tab's toolset



The File Editor project view's toolset

Scrubbing a File

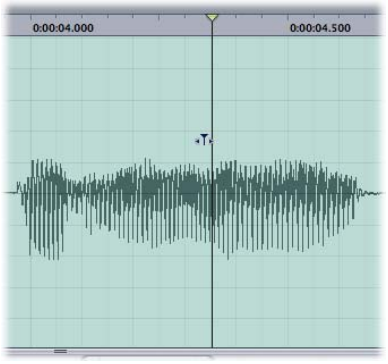
When you scrub an audio file, you play through it, hearing the audio at an accelerated or decelerated speed. If you need to find a specific sound in a file—for example, a crash—scrubbing can come in handy.

To scrub a file:

1 Select the Scrub tool at the top-left corner of the File Editor.

The pointer becomes a scrubber.

2 Drag the scrubber left or right in the File Editor or Timeline.



The file plays at an accelerated rate.

3 When you find the sound you were listening for, release the mouse button.

You can also shuttle through a file using the J, K, and L keys on your keyboard.

To do this	Do this
To play your project at normal (1x) speed	Press L.
To play your project in reverse at normal (1x) speed	Press J.
To double, triple, or quadruple the current playback speed	Press L or J two, three, or four times.
To pause playback	Press K.

Zooming In to a File

Like the Timeline, the File Editor has a Zoom slider to help you see the details of your file. It also has a Zoom tool.

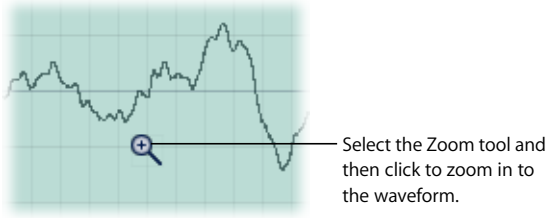
To zoom in to a file:

- Drag the Zoom slider at the bottom of the File Editor.

As you can see, the Zoom slider shows you more file detail, but it usually will not zoom in far enough to reveal your file's samples.

To increase or decrease the zoom level, do one of the following:

- Select a section of the waveform with the pointer. The waveform is automatically zoomed in to the selected section.
- Select the Zoom tool at the top-left corner of the File Editor, and then click the waveform repeatedly.

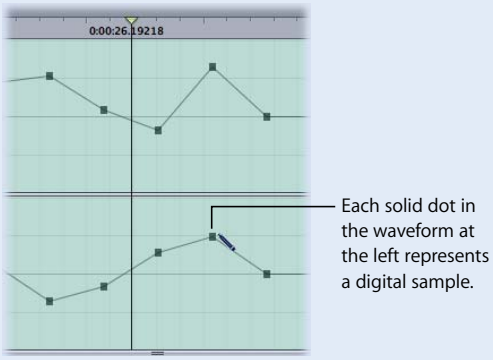


To zoom out and make the waveform smaller, press Option while clicking the waveform.

When you can no longer zoom in, you have reached the file's samples.

What Is a Sample?

A *sample* is the smallest measure of digital audio. To understand how small a sample is, consider this: one second of audio requires thousands of samples. Commonly used sample rates include 44.1 kHz for CD-quality audio and 48 kHz for digital video–quality audio files.



Samples are produced by analog-to-digital converters that measure (sample) continuously changing analog audio strength and that output discrete numbers at regular intervals of time.

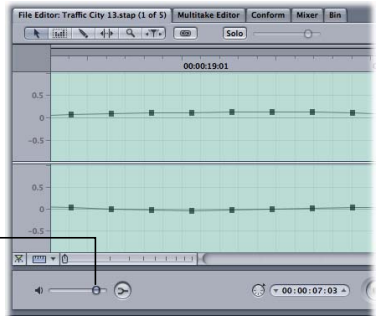
In Soundtrack Pro, you define your sample rate, the size of the digital samples used in your project, when you configure your project settings.

Editing a File's Samples

While most edits don't require moving samples individually, some sound editors prefer to work at the sample level. You can easily edit the individual samples of an audio file, changing the amplitude of one or several samples.

To edit a file's samples:

1 In the File Editor project view, use the Zoom tool or drag the Zoom slider to zoom in to the file and reveal its waveform's samples.



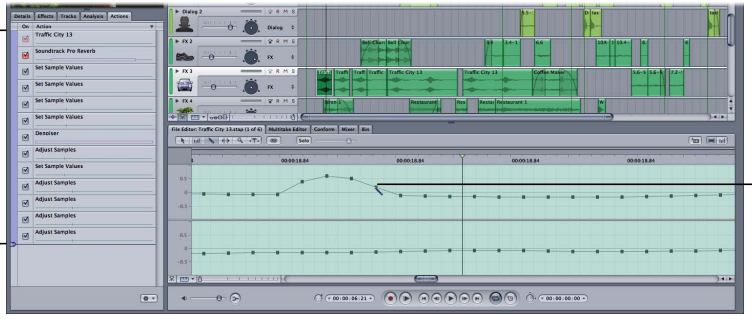
Drag the Zoom slider to the far left to view a waveform's samples.

2 Select the Sample Edit tool at the top-left corner of the File Editor.

The pointer becomes a pencil.

3 To change the amplitude of a series of samples, drag left or right with the Sample Edit tool.

To increase or decrease a single sample's amplitude, drag the sample up or down.



Each edit you make appears as an action in the Actions list.

Drag horizontally to draw new samples, or drag an individual sample up or down.

As you edit your file's samples, actions appear in the Action list.

Time Stretching an Audio File

Time stretching a section of an audio file alters its length. Time stretching is particularly useful when editing dialogue because you can alter the timing of the dialogue without affecting its pitch.

To time stretch a file:

1. View the file in the File Editor project view.
2. Select the Audio Stretching tool.

The pointer becomes a stretcher.

3. Select the portion of the file that you want to stretch or contract.
4. Position the stretcher over the right edge of the selection. When the stretcher pointer appears, stretch the file farther to the right to lengthen the audio or to the left to speed up the audio.

   Note: If you don't want to overwrite nearby audio files, hold down the Option key while stretching or contracting the file. This lengthens or shortens the file instead of overwriting any nearby files.

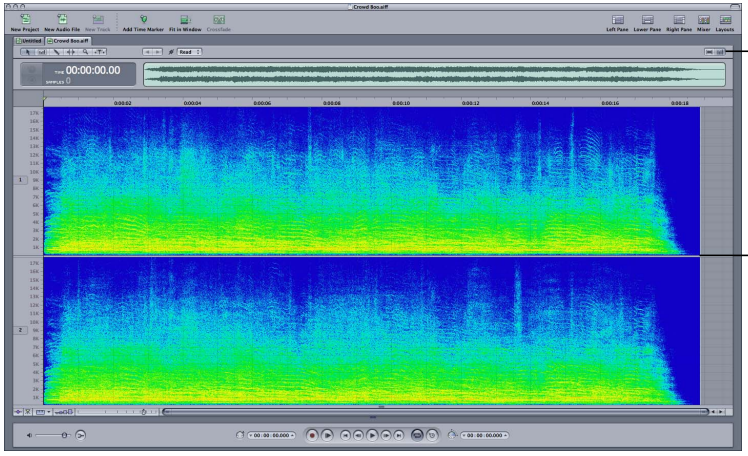
   When you release the mouse button, the File Editor updates the waveform to show the new, stretched audio.

Editing a File in Frequency Spectrum View

In some editing situations, you may want to view a file's frequency spectrum instead of its waveform. For example, if you're looking for a specific frequency of camera noise, you can easily find it using Frequency Spectrum view.

To view a file's frequency spectrum:

- Click the Frequency Spectrum View button at the top-right corner of the File Editor.



To select a frequency region:

- Select the Frequency Selection tool and then select a portion of the frequencies.

Soundtrack Pro has advanced controls that allow you to adjust the spectrum view and switch between a linear and logarithmic frequency scale.

To view the Soundtrack Pro advanced frequency controls:

- Control-click anywhere in the frequency spectrum, then choose Show Spectrum Controls from the shortcut menu to display the Frequency Spectrum HUD.

To learn more about working with frequency spectrum and about the Frequency Spectrum HUD, see the *Soundtrack Pro User Manual*.

Solving Audio Problems

4

Audio files are sometimes less than perfect. You can correct annoying clicks, hum, and other file problems you find in your audio files with the Soundtrack Pro Analyze and Repair feature.

In this chapter, you'll learn about:

- Analyzing and Fixing Problems in an Audio File (p. 57)
- Creating an AppleScript Droplet to Analyze and Fix Audio Files (p. 60)

Analyzing and Fixing Problems in an Audio File

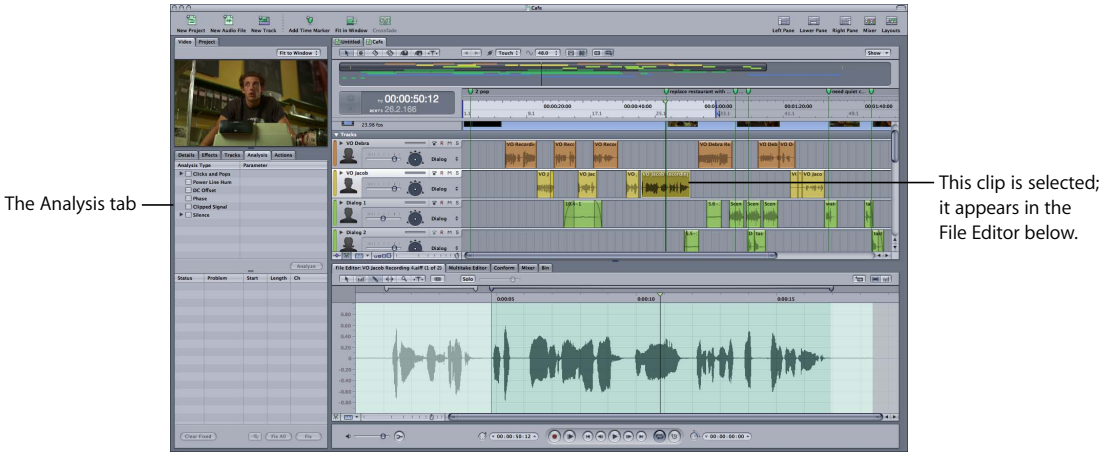
Soundtrack Pro can analyze and correct audio files for a variety of common audio issues:

- *Clicks and pops:* Sudden, short peaks in the waveform can make clicking and popping sounds when played. You can increase the threshold parameter for searching to find fewer clicks and pops.
- *Power line hum:* Power line hum (usually occurring at 50 to 60 Hz) can be found and corrected.
- *DC offset:* DC offset, which is when the samples are not centered around zero, can be found and corrected.
- *Phase:* Usually caused by a distorted or inaccurate stereo image, phase issues usually show up as partial or complete cancelation of the left and right channels.
- *Clipped signal:* Signal overloading, resulting in cut-off audio, can be caused by poor gain staging, surface damage to an analog recording, or other reasons.
- *Silence:* Silent sections of an audio clip can be found and corrected. You can define the silence by threshold or duration.

To analyze an audio file for problems:

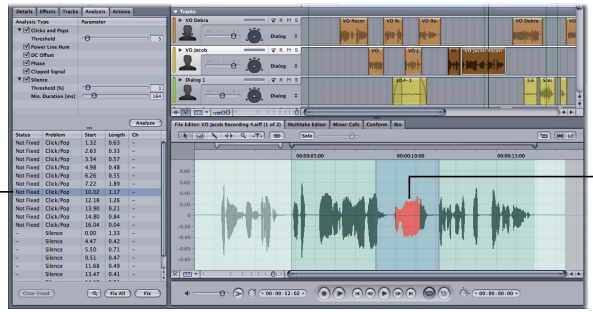
1. Select the file in the Timeline to display it in the File Editor.

   If you want to analyze just a section of the file, select just that section in the File Editor tab.



2. In the Analysis tab, select one or more audio problems from the Analysis Type list and then click the Analyze button.

Soundtrack Pro analyzes the file and then reports each problem it detects in the analysis results list. It also marks the problem area of the waveform in red.


The analysis results list reports the problems found in the order they appear on the waveform.
The problem (and problem area) selected in the Analysis tab is identified and displayed in red.

- *Status:* Indicates whether the problem exists or has been fixed.
- *Problem:* Indicates the problem type.
- *Start:* Indicates when the problem begins.
- *Length:* Indicates the problem's duration.
- *Channel:* Indicates where the problem occurs: in the left channel (L), right channel (R), both channels (LR), or other (-).

After identifying a problem, you might want to view it in detail on the waveform.

To examine a found problem:

1. Select the problem in the analysis results list.

   The problem area of the waveform is automatically selected.

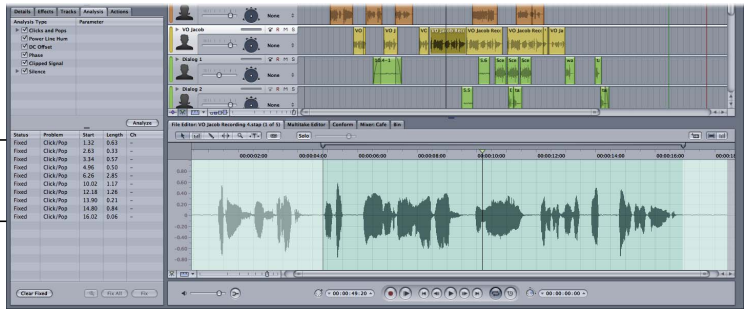
2. Click and hold the Zoom button at the bottom of the Analysis tab to zoom in to the problem you selected.

Now you can fix the problem manually, or you can have Soundtrack Pro fix it for you. You can choose to fix all the problems listed in the analysis results list, or correct the problems one at a time. Of course, you can also choose to leave a problem uncorrected.

To fix all the problems displayed in the analysis results list:

- Click the Fix All button.

The problems are fixed in the waveform, and the problems' status in the analysis results list changes to Fixed.



To fix problems one at a time:

1. Select the problem you want to fix in the analysis results list.
2. Click the Fix button.

The problem is fixed in the waveform, and the problem's status in the analysis results list is reported as Fixed.

Creating an AppleScript Droplet to Analyze and Fix Audio Files

You can save a series of Soundtrack Pro actions, including analyzing and fixing a variety of problems, as an AppleScript droplet. After you've saved the droplet, you can simply drag the files you want to process onto the droplet.

You can get instructions for creating AppleScript droplets to use with Soundtrack Pro in the *Soundtrack Pro User Manual*.

Mixing Stereo and Surround Projects

5

Mixing involves balancing the items in a project to create a full, complete sound. This chapter takes you through a simple mixing process to teach you the basic principles of mixing.

In this chapter, you'll learn about:

- Fundamentals of Mixing (p. 61)
- Working in the Soundtrack Pro Mixer (p. 62)
- Steps for Mixing a Project (p. 64)

Fundamentals of Mixing

You follow the same basic steps to mix both stereo and surround sound projects:

- Balancing tracks' relative volume levels
- Panning tracks to create a balanced stereo or surround spread
- Adding EQ, compression, and other final processing effects
- Setting the project's final volume and eliminating clipping

You can perform these steps in any order, moving between steps as appropriate for your specific project. However, in most situations it makes sense to first finish mixing your project's tracks and then adjust the entire project's levels.

After working through the mixing process described in this chapter, you'll have created your final mix.

Working in the Soundtrack Pro Mixer

In the Soundtrack Pro Mixer tab, you can easily compare and adjust volume for each track, bus, and submix. If you'd rather work with a floating Mixer window, you can drag the Mixer tab off to display a separate Mixer window. You may want to do this when you want to make fine adjustments to a track's volume. You can then manually stretch the Mixer window to the length of the Soundtrack Pro window.

The Soundtrack Pro Mixer mimics a hardware mixing board. The order of the Mixer's channel strips follows the order of the tracks, busses, and submixes in your multitrack project's Timeline. The Master bus is always the last channel strip in the Mixer (and last track in the Timeline).

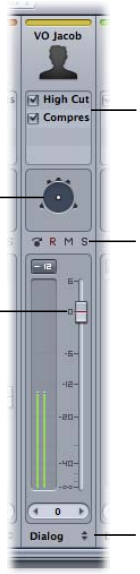
When you make changes to controls such as volume and pan in the Mixer, the corresponding levels automatically update in the Timeline's header controls. The Mixer's vertical channel layout makes it easy for you to see the relative volume levels of each of the tracks.

The Mixer has a channel strip for each track, bus, and submix, and the Master bus in your project's Timeline.

Each track channel strip contains the track's name and icon, effects slots, panners (for stereo or surround), buttons for bypassing effects, an Arm for Recording button, buttons for muting and soloing the track, volume faders, meters, and a Submix pop-up menu. While the channel strips for tracks, busses, submixes, and the Master bus have slightly different controls, they share many common controls.

- The channel's icon and color correspond with the track icon and color in the Timeline.
- Effects that have been applied to the tracks, busses, submixes, or Master bus appear in the Effects list. You can add effects here or in the Timeline.
- The panner can be round (for surround) or horizontal (for stereo).

- You can set a track's volume using the vertical volume fader or by entering a number in the volume value slider.
- You can route a track, bus, or submix channel using the pop-up menu at the bottom of the channel. This pop-up menu corresponds with the Routing pop-up menu in the Timeline.



The Effects list shows all the effects applied to the track, bus, or submix.

A surround panner; if the channel is in stereo, a stereo panner appears here.

Playback controls, including mute and solo

Volume can be set by dragging the volume fader or by entering a number in the value slider below.

Specify the submix to send the track to (or, in a submix, the channels to send to the submix) from this pop-up menu.

You can reorder your channel strips by dragging them to a new order at any time in the same way you can move the tracks, busses, and submixes in the Timeline.

To do this	Do this
To reorder a channel strip	Drag the channel strip by its drag handle left or right to a new position.
To copy a channel strip	Option-click the channel strip's drag handle, then drag it left or right.
To remove a channel strip from the Mixer	Select the channel strip, then choose Multitrack > Remove [*item*].

Note: If you prefer to mix your project using hardware control surfaces, you can add surfaces that use the Mackie Control and Logic Control protocols to communicate with your computer.

Steps for Mixing a Project

This section takes you through a generic mixing process for a film project made of voiceover, dialogue, effects, and music tracks. This mini-tutorial is intended to give you a general sense of the goals and outcome of mixing a film audio project: to adjust the individual audio tracks and create a balanced master mix.

Step 1: Mix the voice tracks
Adjust the volume and balance of the voiceover and dialogue tracks.

Step 2: Mix the effects and music tracks
Adjust the volume of the effects and music tracks.

Step 3: Adjust the overall mix
Make overall adjustments to the project.

Step 4: Correct clipping on the Master bus or for exported items
Verify that none of the audio exceeds the maximum volume.

Step 5: Listen one more time
Listen one more time, just in case.

Mixing the Voice Tracks

In this step, you check the volume and balance of the voice tracks.

In the Cafe example, there are two groups of voice tracks: the primary voice (VO Debra and VO Jacob) and the secondary voice (Dialog 1 and Dialog 2).

To mix the first set of voice tracks:

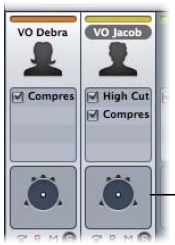
1 Solo each main voice track by clicking its Solo button.

Click the Solo button to solo one or more tracks.

2 Pan, or move, each of the soloed main voice tracks to center (0).

3 Play the primary voice tracks again. How does the playback sound?

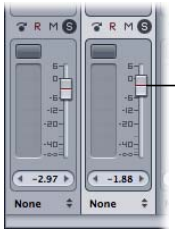
4 Adjust the panning as appropriate for your mix, depending on the type of panner the tracks have and the location from which you want the sound to emerge. Typically, dialogue is mixed almost exclusively in the center channel.



5 Press the Space bar to play the primary voice tracks again. How does it sound?

6 If necessary, add any EQ, compression, or other processing effects to complete the sound of your main voice channels.

7 Adjust the relative volume of the main voice tracks, leaving some cushion (typically around –6 dB) in case you need to raise the levels later.



To mix the dialogue tracks (Dialog 1 and Dialog 2):

- Repeat the mixing process for the other voice tracks in your project. For the Cafe project shown in this example, you would repeat the process on the Dialog 1 and Dialog 2 tracks.

In this example, you would repeat the mixing process for the secondary tracks, Dialog 1 and Dialog 2.

Mixing the Effects and Music Tracks

This step repeats the mixing process on your project's other tracks. Background tracks, like music, require a bit more attention because they do not automatically blend together in the way the voice tracks can. For this step, you'll repeat the mixing process on each individual track.

All of the effects and music tracks

To mix an effects or music track:

1. Solo the first of your effects and music tracks (in this example, the first FX track), then adjust its pan to center and play the track. How does it sound?
2. Play the track again, then adjust the panning as appropriate for your mix, depending on the type of panner the track has and the location from which you want the sound to emerge.
3. Play the track again. If necessary, add any EQ, compression, or other processing effects to complete the sound of the track.
4. Adjust the relative volume of the track, leaving some cushion (typically around –6 dB) in case you need to raise the levels later.

   Repeat this process on each of the remaining tracks.

Now all the tracks in your project should be adjusted for volume, pan, and required surround panning.

Adjusting the Entire Mix

Once you have mixed all the individual tracks in your project, you should listen to all the tracks at least a few more times. Then, if necessary, add any EQ, compression, or other processing to the overall project in the submix channel.

Note: It's helpful to have all the meters in the Mixer, as well as the project audio meter in the Utility tab, showing for this final step.

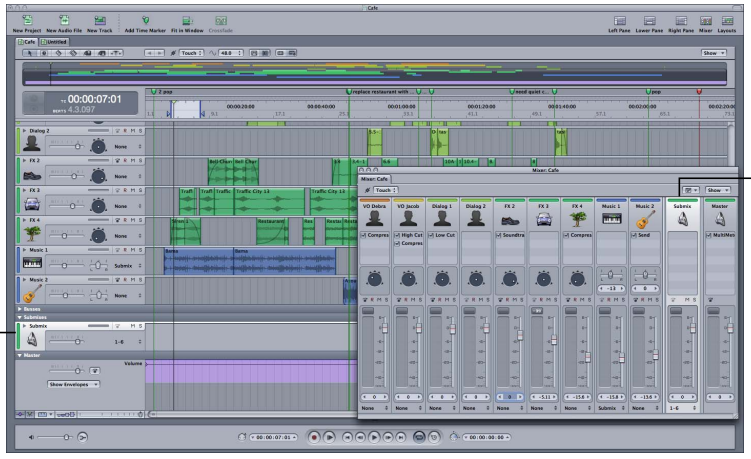
Important: Before you begin this step, verify that none of the tracks are soloed or muted.

To make changes to the overall mix:

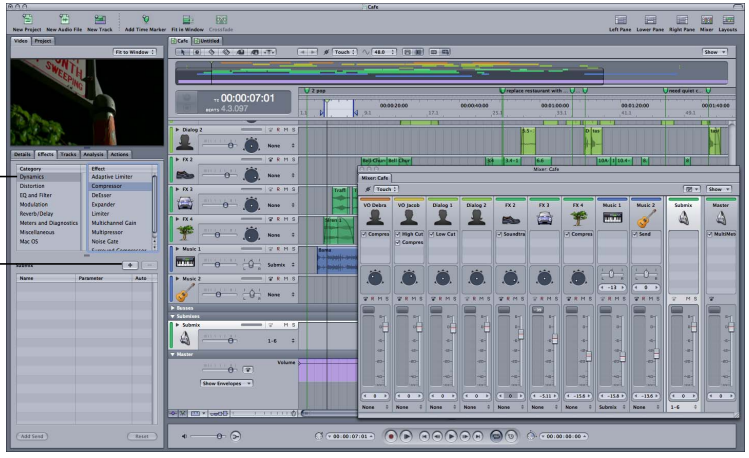
1. Press Shift-Return to play your project. Listen to it. Does it need any final adjustments?

   For this example, a compressor will be added to the Cafe project's submix track to even out the final mix.

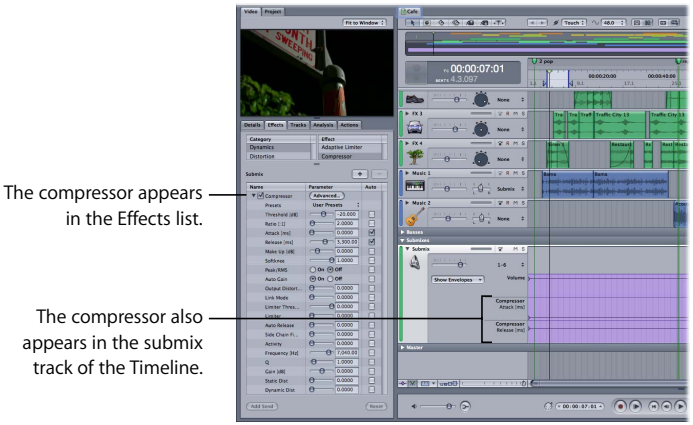
2. Select the submix track in the Mixer. When you do, the submix track in the Timeline is automatically selected.


When you select the submix track in the Mixer, the submix track in the Timeline is also selected.
Select the submix track. In this example, the Mixer tab is a floating window and has been resized.

3. To add a compressor to the submix track, select the Effects tab, select Dynamics and Compressor, and click the Add (+) button.



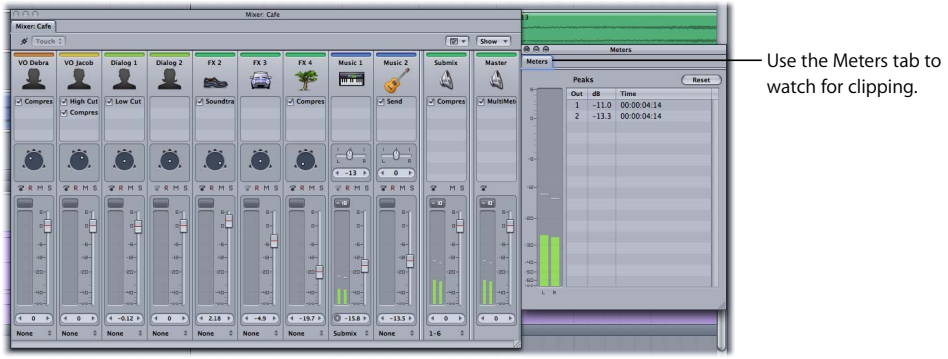
The compressor is added to the Effects list in the Effects tab; it also appears in the Effects list in the submix track in the Timeline and in the Mixer.



4 Press Shift-Return to play your project again. How does the compressor effect change the sound of your final mix?

If you want to further adjust the compressor, you can display it by clicking the Advanced button in the Effects tab; you can also automate the compression envelope on the submix track in the Timeline.

Play the project once again. As the project plays, watch your project's audio meter (in the Meters tab), especially the clipping meter, which lights up any time the levels are loud enough to distort the audio.



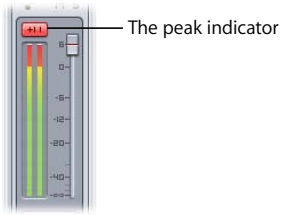
Note: Soundtrack Pro projects clip whenever the output displayed in the level meters exceeds zero decibels (0 dB).

Watch the audio while the project plays through to its end. If you saw any clipping, you'll need to remove it.

Correcting Clipping on the Master Bus or for Exported Items

Clipping occurs whenever the output displayed in the level meters exceeds zero decibels (0 dB). Because Soundtrack Pro uses floating point digital audio, clipping only needs to be corrected on a multitrack project's Master bus.

To fix clipping, you simply adjust the volume until the clipping ceases.



To find and correct clipping:

1. Reduce the volume by the amount shown in the peak indicator using the volume fader or volume value slider.
2. Replay the project from the beginning (starting from the beginning resets the peak indicators in your project).
3. If clipping still occurs, continue to reduce the volume until the project does not clip.

Listening One More Time

To be safe, listen to your project again (or a few more times). Is this your final mix?

If so, your mixing process is complete.

In some situations, you may also want to listen to a mono mix of your project. For example, if your final project will be listened to on a single speaker or other nonstereo output, you might want to test the mono mix for phasing and other playback issues.

To listen to a temporary mono mix:

- Press Shift-Return to play your project from the beginning, then click the Mono Mix button, located to the right of the Monitor Volume slider and to the left of the transport controls.

Click and hold the Mono Mix button while the project is playing to hear a mono mix.

You can also Option-click the Mono Mix button to play back a temporary mono mix without having to hold down the button.

To stop listening to the mono mix, release the mouse button.

Exporting Your Multitrack Project

6

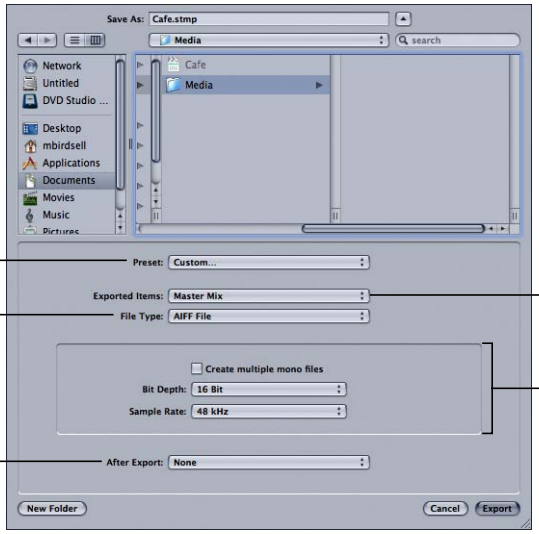
This chapter explains three ways to export a project: as a final mix, as several split mixes, and as a podcast. It also explains how to save a final project with media, a good alternative to exporting if you want to continue to work on your project files, and discusses how to send a multitrack project to Final Cut Pro.

In this chapter, you'll learn about:

- The Export Dialog (p. 74)
- Exporting a Final Mix (p. 75)
- Exporting a Submix (p. 76)
- Exporting a Multitrack Project to Final Cut Pro (p. 76)
- Exporting a Podcast (p. 77)
- Saving a Multitrack Project with Its Media Files (p. 79)

The Export Dialog

The Export dialog in Soundtrack Pro is a flexible tool that provides numerous options for your workflow and distribution needs.



Access export presets with this pop-up menu.

Define the exported file type here.

Choose to open another application, like Final Cut Pro or Logic, or choose other options.

Use this pop-up menu to export your master mix, submix, and so on.

This section updates to display parameters specific to the file type chosen in the File Type pop-up menu.

- *Preset pop-up menu:* Create custom export presets with any combination of exported items, file types, bit depths, sample rates, and post-export actions.
- *Exported Items pop-up menu:* Choose to export a master mix or export the component parts of your multitrack project as individual files or as groups of files.
- *File Type pop-up menu:* Choose the file type for the exported audio file or files.
- *"Create multiple mono files" checkbox:* Select this checkbox to export a separate audio file for each output channel in your multitrack project.
- *Bit Depth pop-up menu:* Choose a bit depth for the exported file.
- *Sample Rate pop-up menu:* Choose a sample rate for the exported file.
- *After Export pop-up menu:* Choose a post-export action.

Exporting a Final Mix

Here's a set of basic export instructions to export a completed multitrack project. Make sure that the multitrack project you want to export is open and ready to be exported.

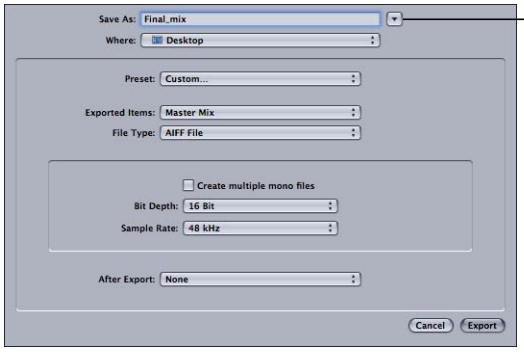
To export a master mix of a multitrack project:

1. Choose File > Export.

   The Export dialog appears.

2. Enter a name for your mix in the Save As field.

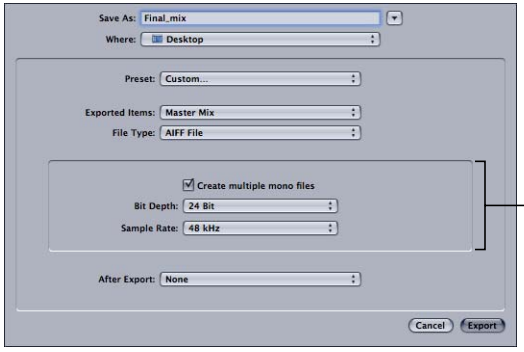
3. If you want your file to be exported somewhere other than your desktop, choose a location from the Where pop-up menu.



4. Choose Master Mix from the Exported Items pop-up menu.

5. Choose a file type from the File Type pop-up menu.

6. Make any other changes, including setting parameters specific to a file type.



7. When you're ready to export your mix, click Export.

   Your master mix is exported to the location and with the criteria you specified.

Exporting a Submix

You can also easily export submixes of your multitrack project. The standard splits for creating multiple language tracks on DVDs include separate dialogue (D1), music (M1), and effects (E1) mixes; however, you can export any combination of tracks, busses, and submixes by following the basic steps explained below.

To export a submix:

1. In the Timeline or the Mixer, select the tracks as well as any busses or submixes you want to export.
2. Choose File > Export.
3. Choose Selected Tracks, Busses, and Submixes from the Exported Items pop-up menu.
4. Choose a file type for your exported files from the File Type pop-up menu.
5. Click Export.

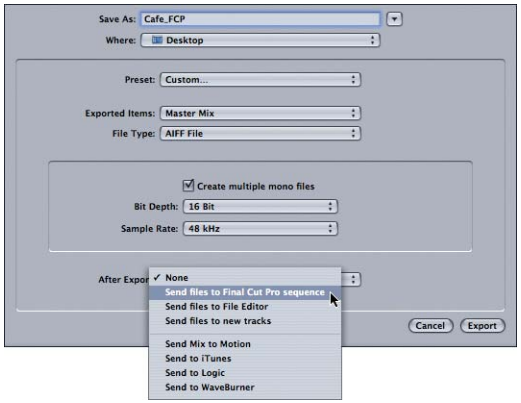
The submix is exported to the location you specified.

Exporting a Multitrack Project to Final Cut Pro

If you brought a Final Cut Pro audio sequence into Soundtrack Pro, you can easily send a mixdown of the project you are editing in Soundtrack Pro back to Final Cut Pro.

To update a Final Cut Pro project with a mixdown from Soundtrack Pro:

1. When your multitrack project is completed, choose File > Export.
2. Define your export options.
3. Choose "Send files to Final Cut Pro sequence" from the After Export pop-up menu.



4. Click Export.

If you have Final Cut Pro installed on your system, the multitrack project automatically opens as a sequence in Final Cut Pro, with the mixdown correctly positioned in the Timeline and the original audio tracks muted.

If you do not have Final Cut Pro installed on your system, you can save the project and later import the resulting Soundtrack Pro project into the original Final Cut Pro project with the mixdown correctly positioned in the Timeline and the original audio tracks muted.

More shortcuts have been designed to help you repeatedly move audio clips between Soundtrack Pro and Final Cut Pro. For more information, see the *Final Cut Pro User Manual* and the *Soundtrack Pro User Manual*.

Exporting a Podcast

Exporting a podcast from Soundtrack Pro files is easy. You simply mark your multitrack project with podcast markers and then export your podcast.

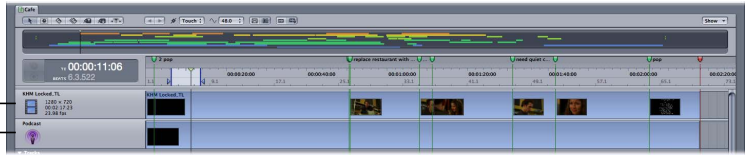
To add podcast markers to your project:

1 To display the podcast track in the Timeline, choose Podcast Track from the Show pop-up menu in the upper-right corner of the Timeline.

Choose Podcast Track from the Show pop-up menu.

The podcast track appears near the top of the Timeline.

By default, the podcast track appears just below the video track (if you have one in your project) with a single blue podcast region that spans the entire length of the project.



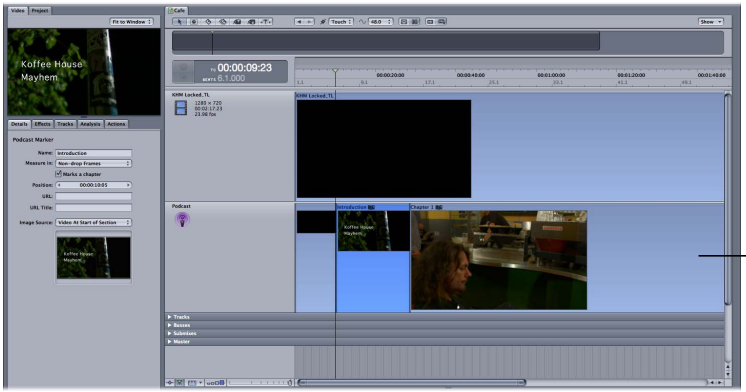
2 Find the location in your project where you want the podcast to begin.

3 To add a podcast marker, cut the clip with the Blade tool.

a Select the Blade tool.

b Click the clip; as you click, a podcast marker appears. Each marker defines a chapter.

c Add any necessary details for the podcast marker in the Details tab.



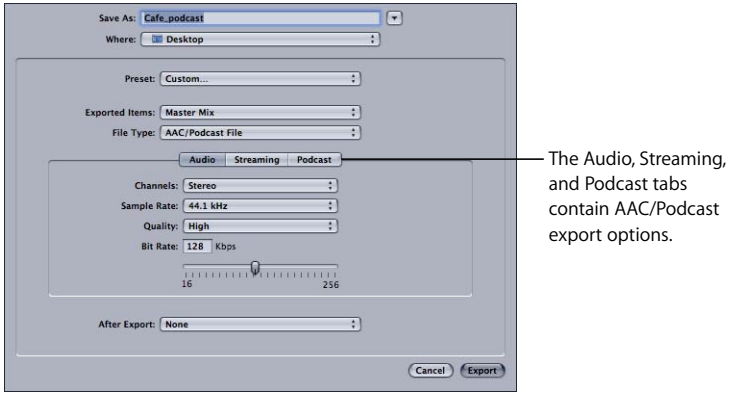
When you've applied two or more podcast markers to your project, a podcast region appears in the podcast track.

4 Choose File > Export.

5 Choose Master Mix from the Exported Items pop-up menu.

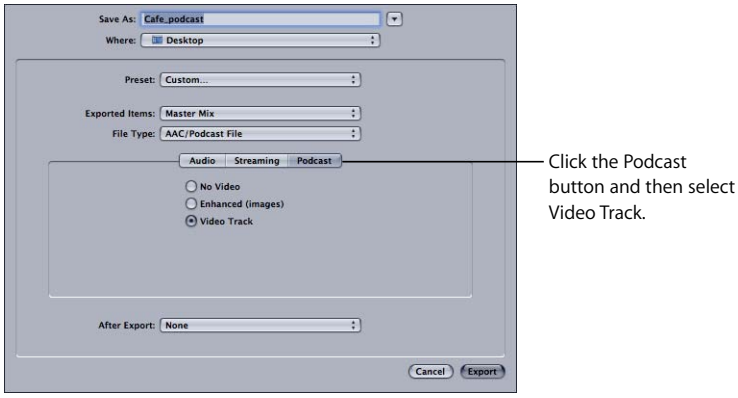
6 Choose AAC/Podcast File from the File Type pop-up menu.

The AAC Audio export options dialog appears.



The default options are good choices for a first attempt at creating a podcast, so leave them at their default settings.

7 If you want to export the video with the podcast, click the Podcast button and then select Video Track.



8 When you're ready, click Export.

The podcast appears in the location you specified.

There's a lot more you can do with podcasts. To learn more, see the *Soundtrack Pro User Manual*.

Saving a Multitrack Project with Its Media Files

As you learned earlier, you can export your project with all of its media files. You can also save your project and all of the media files it uses in the same folder. Saving the project and its media files together is useful when you want to move the project from one computer to another to continue working on it or to archive the project and media for later use.

Be sure the project you are about to save is open.

To save a project and its media files together:

1. Choose File > Save As.
2. Enter a name for your multitrack project in the Save As field.
3. In the Save dialog, create a new folder to hold the collected project files.
4. Choose the new folder from the Where pop-up menu.
5. Select the Collect Audio Files and Collect Unused Audio Files checkboxes. If the project includes a video track, select the Collect Video File checkbox to save the video in the selected folder.
6. Click Save.

The project file and a copy of every audio file associated with the project are saved in the selected location.

Note: Because video files are typically very large files, saving a copy of the video file may take several minutes and may require a large amount of disk space.

What's Next?

7

More Soundtrack Pro Resources

Now that you've completed this guided tour, you should have a basic understanding of what you can do with Soundtrack Pro.

There is much more information available for you to learn about using Soundtrack Pro.

- The *Soundtrack Pro User Manual* contains detailed information about each of the Soundtrack Pro features. To access the user manual, choose Help > Soundtrack Pro User Manual.
- Apple's Soundtrack Pro site contains links to tips, tutorials, and more. To access the site, choose Help > Soundtrack Pro on the Web.
- AppleCare maintains a Soundtrack Pro Support site that provides KnowlegeBase articles, forums, documentation, updates, and more. To access this site, choose Help > Soundtrack Pro Support, or go to http://www.apple.com/support/soundtrackpro.
- Apple's Pro site keeps you aware of the latest tips, tools, and techniques for using Apple's professional applications. Visit it at http://www.apple.com/pro.

An Introduction to the Soundtrack Pro Interface

This appendix provides an overview of the Soundtrack Pro interface—the tabs, buttons, pop-up menus, and other elements that make up Soundtrack Pro.

In this appendix, you'll learn about:

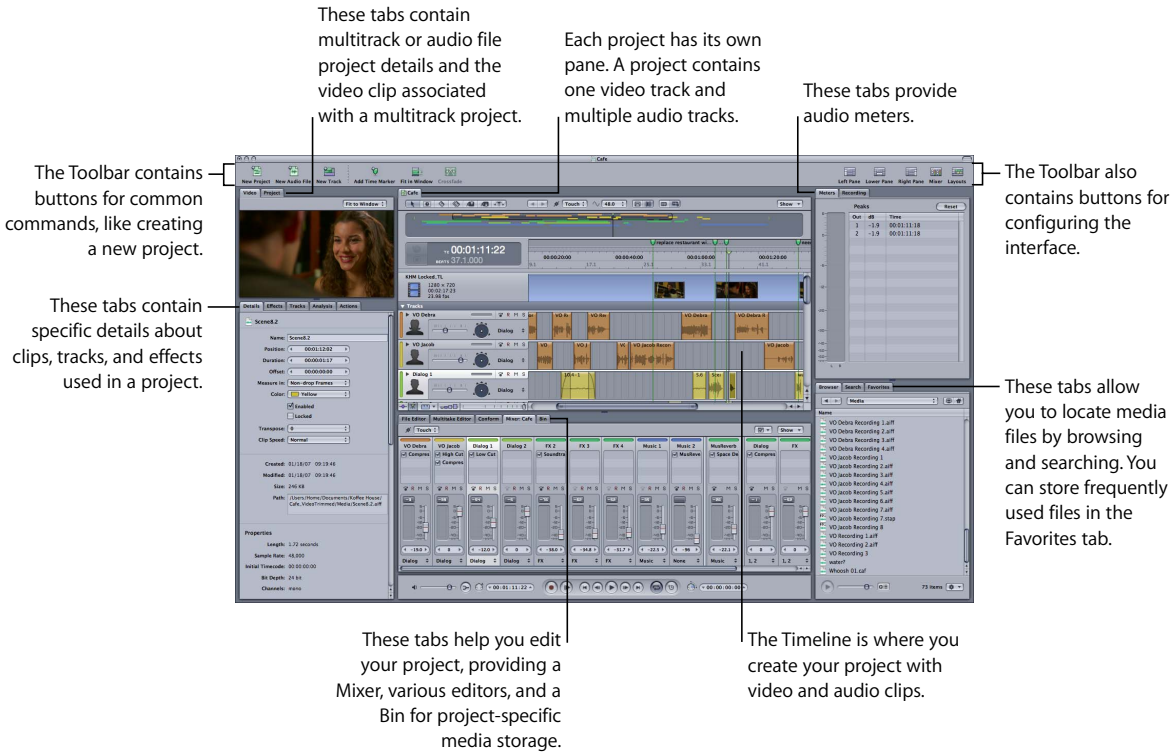
- Working with Tabs (p. 84)
- The Timeline (p. 85)
- The File Editor (p. 86)
- The Multitake Editor (p. 87)
- Conform (p. 87)
- The Mixer (p. 88)
- The Bin (p. 89)
- The Toolbar (p. 89)
- Tabs in the Left Pane (p. 90)
- Tabs in the Right Pane (p. 91)
- Arranging the Soundtrack Pro Interface (p. 92)

Important: You can also use tooltips—the descriptive phrases that appear when you hold the pointer over a button or icon for a few seconds—to identify an element. Then you can learn more about that element in the *Soundtrack Pro User Manual*.

Working with Tabs

Soundtrack Pro is a collection of tabbed workspaces. You can hide and display the right, left, and lower panes of the Soundtrack Pro workspace using the interface buttons in the top-right corner of the Toolbar. You can also tear off any tab and create a floating window.

When you first open a multitrack project in Soundtrack Pro, it displays the Standard layout, a single-window layout with multiple tabs.


These tabs contain multitrack or audio file project details and the video clip associated with a multitrack project.
Each project has its own pane. A project contains one video track and multiple audio tracks.
These tabs provide audio meters.
The Toolbar contains buttons for common commands, like creating a new project.
The Toolbar also contains buttons for configuring the interface.
These tabs contain specific details about clips, tracks, and effects used in a project.
These tabs allow you to locate media files by browsing and searching. You can store frequently used files in the Favorites tab.
These tabs help you edit your project, providing a Mixer, various editors, and a Bin for project-specific media storage.
The Timeline is where you create your project with video and audio clips.

The Timeline is located in the center of the Soundtrack Pro window. Most of your audio editing will be done in the Timeline, the File Editor tab, the File Editor project view, and the Mixer.

Below the Timeline is an area that can display a Mixer, a File Editor, a Multitake Editor, a Conform tab, or a Bin tab. To view a tab, click it. If you want to view a clip in the File Editor, make sure you've selected the clip you want to view in the Timeline.

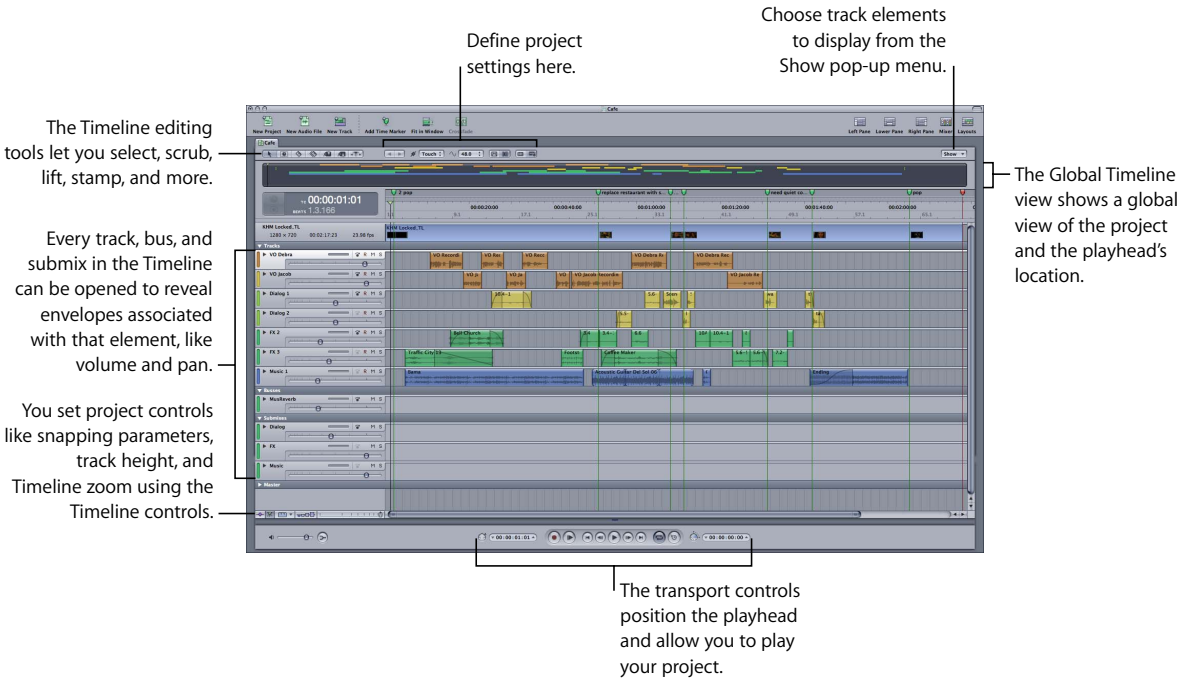
The tabs to the left of the Timeline display information about the selected Soundtrack Pro project. You can watch the video clip associated with a multitrack project in the Video tab and get project information in the Project tab. You can also get specific information about project tracks by viewing the Track tab and get specifics about a clip by viewing the Effects, Details, and Analysis tabs.

The tabs to the right of the Timeline include the output and recording meters, which are used for monitoring audio output, and the Browser, Search, and Favorites tabs, where you can locate and search for audio files on your hard disk, portable drives, and other storage volumes.

Important: Are you seeing an interface other than the one shown above? You might have switched layout views or created a new layout while working in Soundtrack Pro. To view the interface shown above, choose Window > Layouts > Standard (or press F1). For more information about window layouts, see "Arranging the Soundtrack Pro Interface" on page 92.

The Timeline

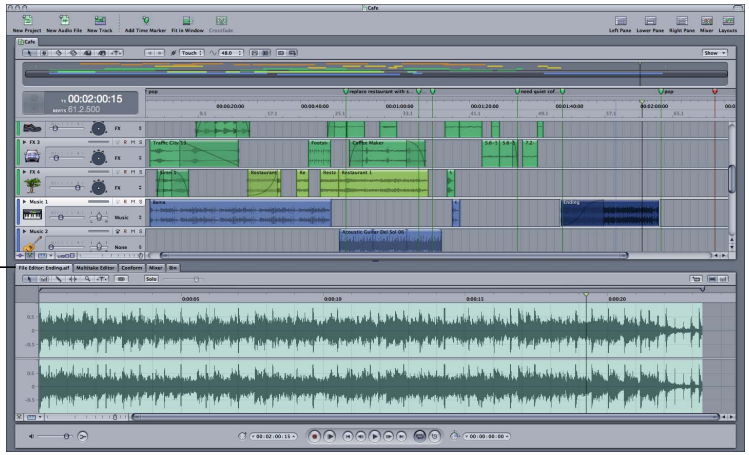
In the Timeline, you control everything from project settings to track display information to specific clip details. The Timeline also contains buttons for functions, like playing, that you can also easily initiate with keyboard shortcuts.


Define project settings here.
Choose track elements to display from the Show pop-up menu.
The Timeline editing tools let you select, scrub, lift, stamp, and more.
The Global Timeline view shows a global view of the project and the playhead's location.
Every track, bus, and submix in the Timeline can be opened to reveal envelopes associated with that element, like volume and pan.
You set project controls like snapping parameters, track height, and Timeline zoom using the Timeline controls.
The transport controls position the playhead and allow you to play your project.

The File Editor

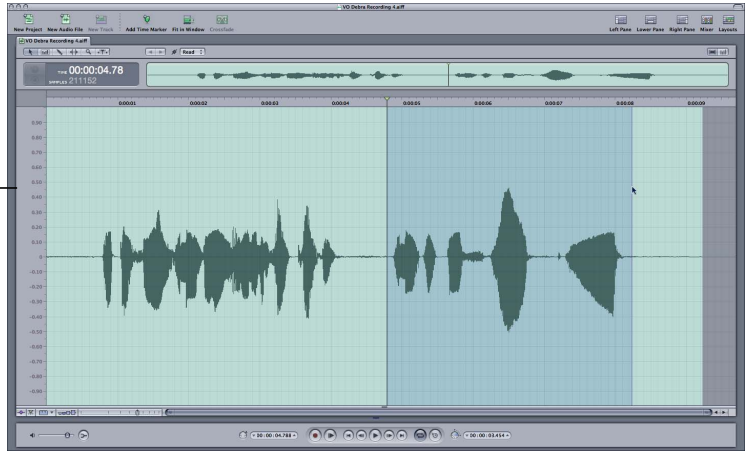
You can view an individual clip in the File Editor tab or in the File Editor project view. Both spaces contain similar buttons and tools; the exceptions include an Automation pop-up menu in the File Editor project view and linking, Solo, and Spot to Playhead buttons and playback controls in the File Editor tab.

You can edit files that are part of a multitrack project in the File Editor tab. When you select a file in the Timeline of a multitrack project, it is shown in the File Editor tab just below the Timeline.



The file selected in the Timeline above is displayed here in the File Editor tab.

You can edit single audio files in the File Editor project view. A single audio file, opened from the Browser tab, Search tab, or Favorites tab, appears in the File Editor project view.



If you double-click a file, it appears in the full-screen File Editor project view.

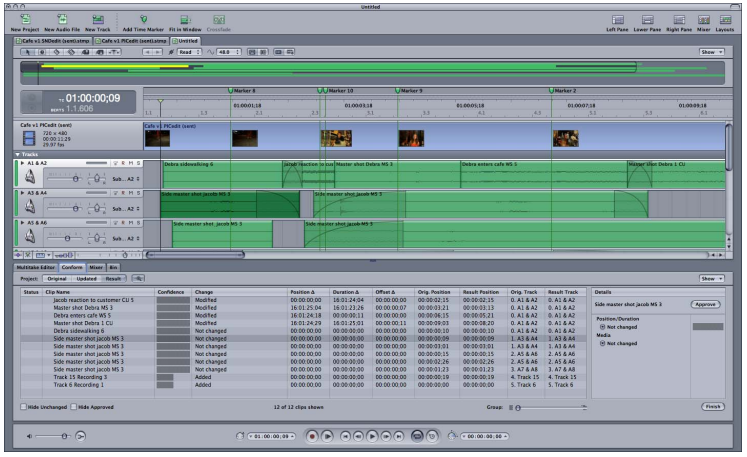
The Multitake Editor

The Multitake Editor is a powerful tool used for mixing and syncing multitake recordings and automatic dialogue replacement (ADR).

The Multitake Editor tab is not covered in this *Getting Started* book. To learn how to use the Multitake Editor, see the *Soundtrack Pro User Manual*.

Conform

The Conform tab allows you to update your audio project to match video project changes.



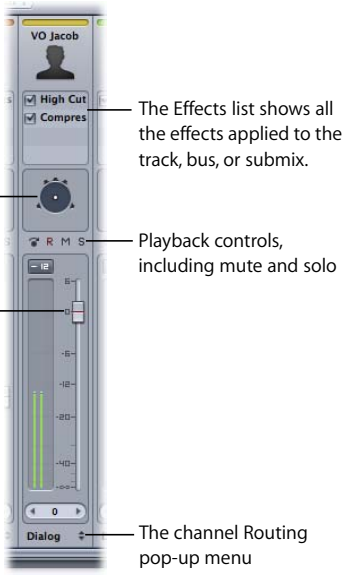
The Conform tab is not covered in this *Getting Started* book. To learn how to use the Conform tab, see the *Soundtrack Pro User Manual*.

The Mixer

When you click the Mixer tab, a project Mixer like the one shown below appears. It contains a channel for each track in your project.

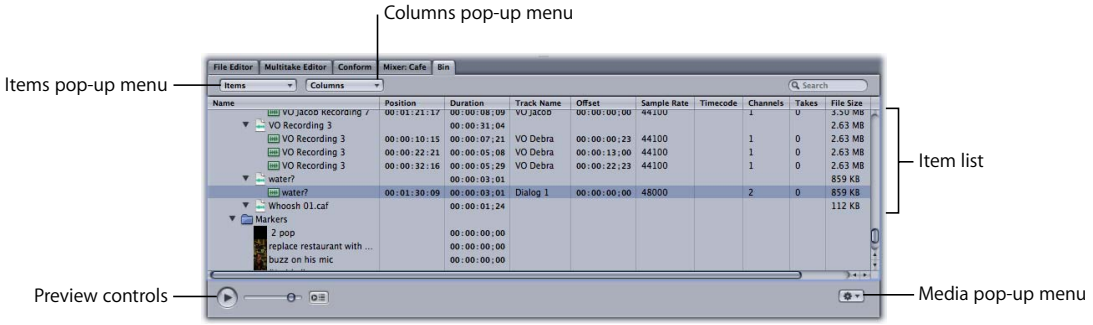
Set the Automation Mode pop-up menu.
Customize the controls shown in the Mixer using this pop-up menu.
Each track in your project's Timeline corresponds to a channel strip in the Mixer.
Show and hide audio tracks, busses, and submixes from this pop-up menu.

Tracks and busses contain the same controls: an Effects list, a panner, playback and volume controls, and a Routing pop-up menu. Submixes and the Master bus do not have panners.


A surround panner; if the channel is in stereo, a stereo panner appears here.
The Effects list shows all the effects applied to the track, bus, or submix.
Playback controls, including mute and solo
Volume can be set by dragging the volume fader or entering a number in the value slider below.
The channel Routing pop-up menu

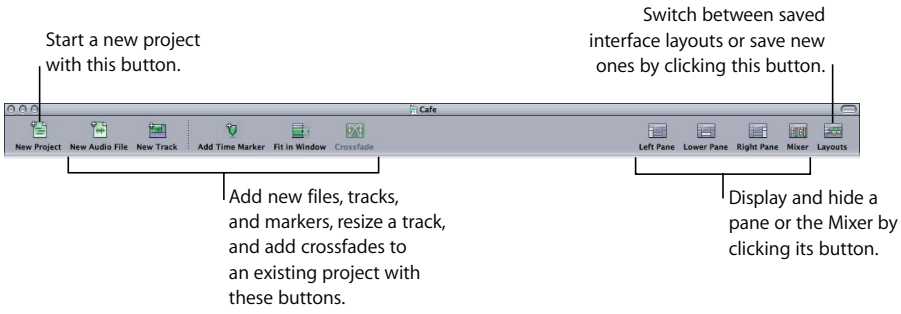
The Bin

The Bin tab lists information about each of the items in every open project. The Bin also features sort and search functions to help you locate an item in any open project. You can use this tab to track the files and clips in your project, get file information, and so on.



The Toolbar

You can customize the Toolbar to contain the buttons you choose. Here's an overview of the Toolbar's default buttons.


Start a new project with this button.
Switch between saved interface layouts or save new ones by clicking this button.
Cafe
New Project
New Audio File
New Track
Add Time Marker
Fit in Window
Crossfade
Left Pane
Lower Pane
Right Pane
Mixer
Layouts
Add new files, tracks, and markers, resize a track, and add crossfades to an existing project with these buttons.
Display and hide a pane or the Mixer by clicking its button.

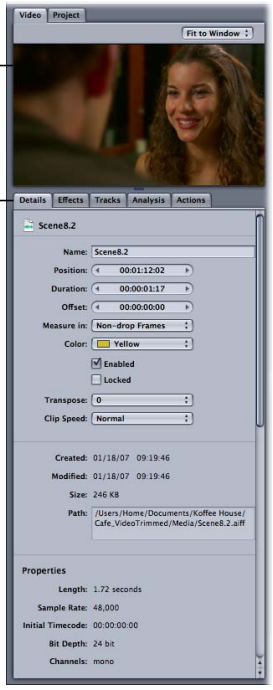
Tabs in the Left Pane

The tabs at the left of the Timeline reveal details about various parts of your project. If your multitrack project contains a video clip, it is displayed in the Video tab.

The Details, Effects, Tracks, and Actions tabs all update to show the relevant details for the clip you select in the Timeline. The Effects tab shows parameters for any effects added to a selected clip, the Actions tab provides an editable list of the actions applied to the selected clip or file, and so on. The Analysis tab helps you find and fix common audio problems in a file.

Video you've added to your project is displayed here.

View clip details or effects, actions, or track details by selecting a tab.

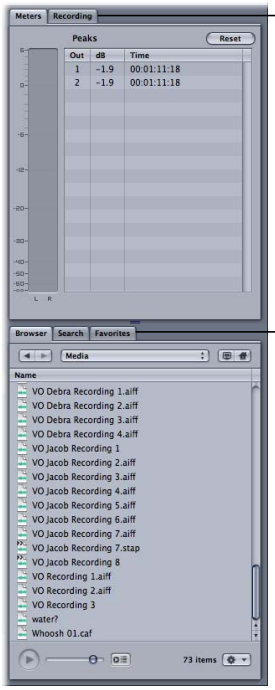


Tabs in the Right Pane

You can view audio meters, record audio, and browse, index, find, and organize your audio clips using the Meters, Recording, Browser, Search, and Favorites tabs.

The Meters and Recording tabs show the levels of audio coming in, when audio is being recorded by Soundtrack Pro, and out, when audio is being played.

The Browser tab works like a Finder window, allowing you to browse through your hard disk and external volumes. In the Search tab, you can index your audio files, then search for them by criteria including names, keywords, and other metadata. When you find a clip you want to use, you can put it in your Favorites tab so you can easily find it later.



The Meters and Recording tabs display levels for media being played or recorded.

The Browser, Search, and Favorites tabs are located here.

Arranging the Soundtrack Pro Interface

Soundtrack Pro is customizable: you can rearrange the Soundtrack Pro tabs, hide and display areas of the interface, and save custom Soundtrack Pro layouts.

Arranging Tabs

The Soundtrack Pro interface is made up of tabs. You can tear off any tab to create a separate floating window. This window can be resized or hidden. When you're done using the window, you can easily return the tab to its original location.

To tear off a tab:

- Select the tab, then drag it out of the area where it was nested.

To resize a window:

- Position the pointer at the edge of the window, then drag the edge to a new size.

To return a tab to its original location in the Soundtrack Pro interface:

- Drag the tab into the interface.

Using Preconfigured Interface Layouts

Soundtrack Pro comes with two preconfigured interface layouts.

Standard layout is the Soundtrack Pro default layout. It is shown throughout this book. Separate Mixer and Video, the other interface layout, has three windows: a Standard layout window, a floating Mixer window, and a floating Video window.

To view the Separate Mixer and Video layout:

- Choose Window > Layouts > Separate Mixer and Video (or press F2).

  The Separate Mixer and Video layout puts the Video and Mixer tabs in separate, floating windows.

To switch back to Standard layout:

- Choose Window > Layouts > Standard (or press F1).

Customizing Your Interface

You can choose to display any tab in Soundtrack Pro in its own window.

To put any Soundtrack Pro tab in its own floating window:

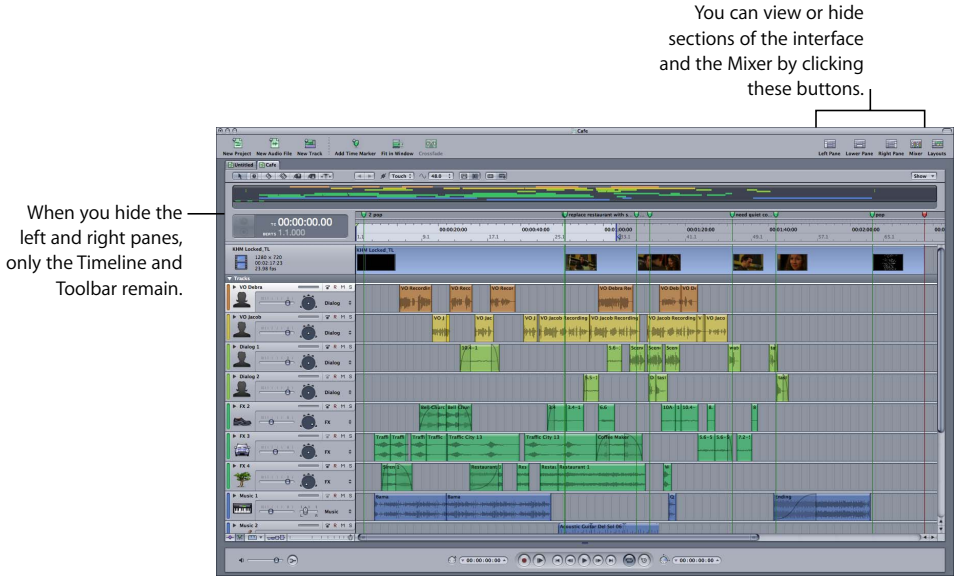
- Drag the tab off its location in the Soundtrack Pro interface.

The tab appears in its own window.

You can also show or hide the areas of the Soundtrack Pro interface.

To show or hide the left, lower, or right pane of Soundtrack Pro, do one of the following:

- Choose Window > Toggle Left Pane, Toggle Lower Pane, or Toggle Right Pane.
- Click one of the Pane buttons at the right of the Toolbar.


You can view or hide sections of the interface and the Mixer by clicking these buttons.
When you hide the left and right panes, only the Timeline and Toolbar remain.

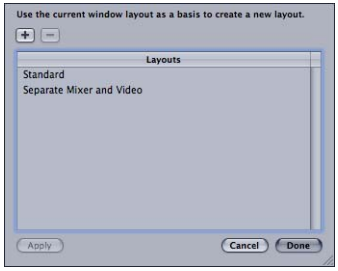
Saving Your Own Custom Layouts

If you find yourself working in a particular interface layout, you can save it. Then, instead of showing and hiding interface elements to create the layout, you can access it later by choosing the layout's name.

To save an interface setup as a custom layout:

1. Click the Layouts button at the right of the Toolbar.

   The Layouts dialog appears.



2. Click the Add (+) button.

   A new, untitled layout appears in the Layouts list.

3. Type a name for your new layout.

4. Click Done.

To access your new layout:

- Choose Window > Layouts, then choose the layout you created from the submenu.

  The Soundtrack Pro window changes to your custom layout.